JANUARY, 1903



THE SUCCESS COMPANY Strand Strand THE CENTS OF COPY



E HOME LIFE BUILDING, 256-257 Broadway, New York. Our offices occupy sixteen rooms fifth and sixth floors, overlooking City Hal Park, the Post-office, and Brooklyn Bridge

4,000

MEN and WOMEN

Made \$25 on Every \$100 Invested

in our Greater New York lots last year-or 100 per cent on amount actually paid in

You can do the same this year

HEN "Success" printed our first advertisement, two years ago, HEN "Success" printed our first advertisement, two years ago, few people realized the true value and significance of a New York real estate investment. It has been an educational process—and our customers are our best advertisers. Some, knowing us, had full confidence in our judgment and reliability: others simply took us at our word. We sold only half a million dollars' worth of property the first season; the second season, three and a half millions. To-day, thousands of people the country over have been here and thoroughly investigated our proposition and appreciate that it has no parallel in the world as a sterling, money-making opportunity—the

Safest, Most Profitable Investment To-day!



THE PARK ROW, or SYNDICATE BUILDING, Broadway, Park Row, and Ann Street—the tallest office structure in the world, 29 stories, 1.000 rooms, 6,000 occupants—35 minutes from our properties.

\$10 SECURES A \$510 LOT IN GREATER NEW YORK

It's a significant fact that 75 per cent of our mail-order customers who finally visit New York increase their investment from 50 to 200 per cent, and return home with well-grounded enthusiasm, to interest others. Such a record as ours to-day is stronger evidence of the worth of our claims than pages of argument, illustration, statistics, and facts. All these we can give overwhelmingly, and will for the asking; but we point to the one best proof—Results. Nothing could be more conclusive—the unbiased verdict of conservative thousands now well posted on the entire situation.

To keep in touch with the marvelous growth of New York at the present time, her tremendous building operations and almost incredible expansion, is to be convinced that her Brooklyn development must bring to the investor of to-day, within a very few years, thousands of dollars for his hundreds invested. The completion of the new bridges and tunnels now under way

will mark a mighty advance in Brooklyn's population and upbuilding, with corresponding increase in land values. All our properties lie in the sections first affected by this stimulus, and even now showing greatest activity. They are right on the edge of the "density belt," which is rapidly overtaking and surrounding us.

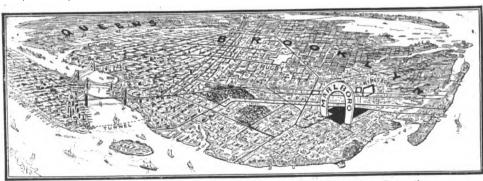
taking and surrounding us.

The phenomenal sale of Rugby, well known to "Success" readers, a year ago, forces us to offer at once—a year earlier than intended—another property, in every sense the equal of Rugby, and what is more, it is the last large tract that we can ever hope to offer in Brooklyn, or that can possibly be advertised or sold at anything like present prices. We shall be restricted in future to scattered blocks and detached lots in various sections—all at much higher prices than we are asking for this remaining prespective "MAPLEOPO" property-" MARLBORO."

We Guarantee 25% Increase in 1 Year

For \$10 down and \$6 per month until paid for, sell you a regular New York City lot, full size, subject to the following guarantees from us: If, at the expiration of the year 1903. this \$510 lot is not worth \$638—or 25 per cent in-crease—based on the price at which our corps of salesmen will then be selling similar lots, we will refund

all of the money you have paid us, with 6 per cent interest additional. If you should die at any time before payments have been completed, we will give to your heirs a deed of the lot without further cost. If you should lose employment, or be sick, you will not forfeit the land.



Bird's-Eye View of portion of Greater New York, showing location of our Properties.

We Give a Free Trip to New York

As a guarantee of good faith, we agree with all persons living east of Chicago to pay you in cash the cost of your railroad fare to New York and return, if you visit our property and find one word of this advertisement a misrepresentation; or in case

you buy we will credit cost of the fare on your purchase; to those living farther away, we will pay a proportion equal to round-trip Chicago

Marlboro occupies the corner of the 31st ward nearest City Hall, and bounded by Gravesend Avenue, 60th Street, Bay Parkway (22d Avenue) and Kings Highway, a half-mile west of four of our other properties which have been such phenomenal successes. We are developing it with the same high class of park-like improvements, in exact accordance with city specifications, on 60, 80, and 100 foot streets, boulevarded with macadam, granolithic curbing, gutters and sidewalks, with flower-beds, trees and shrubbery, city water, etc. Transportation facilities are of superior chargestor and with the new tennels it will be within a minute of City Hall. acter, and, with the new transit, it will be within 20 minutes of City Hall.

Remember that our guarantee absolutely insures you an increase, or your money will be refunded. In fact, as these Marlboro lots are already selling fast, we hereby agree, in order to secure for you the earliest possible advantage of selection and an immediate share in the increase of values, to return to you—cheerfully and without quibbling—all the money you have paid us, if you are not perfectly satisfied, on examining our entire proposition within one year, that it is exactly as represented. Isn't this fair? Sit right down and mail us \$10. You'll never regret it.

NEW YORK CITY 'OOD, HARMON & CO., Dept. F 8, 257 Broadway, =

here is no doubt the property offered by Wood, Harmon & Co., in the 29th and 31st wards represents one of the best investments a man of limited income can make within the corporate limits of Greater New York. It can be said without hesitancy that Wood, Harmon & Co. are perfectly reliable, and are worthy lest confidence of the investor, whether he resides in Greater New York or any other section of the United States."

THE NASSAU NATIONAL BANK OF BROOKLY, N.

Unusual opportunities for a limited number of energetic men of unquestioned reputation to act at our permanent representatives in their own community. Write for particulars, addressing "Agency Dept. F8," as a love.

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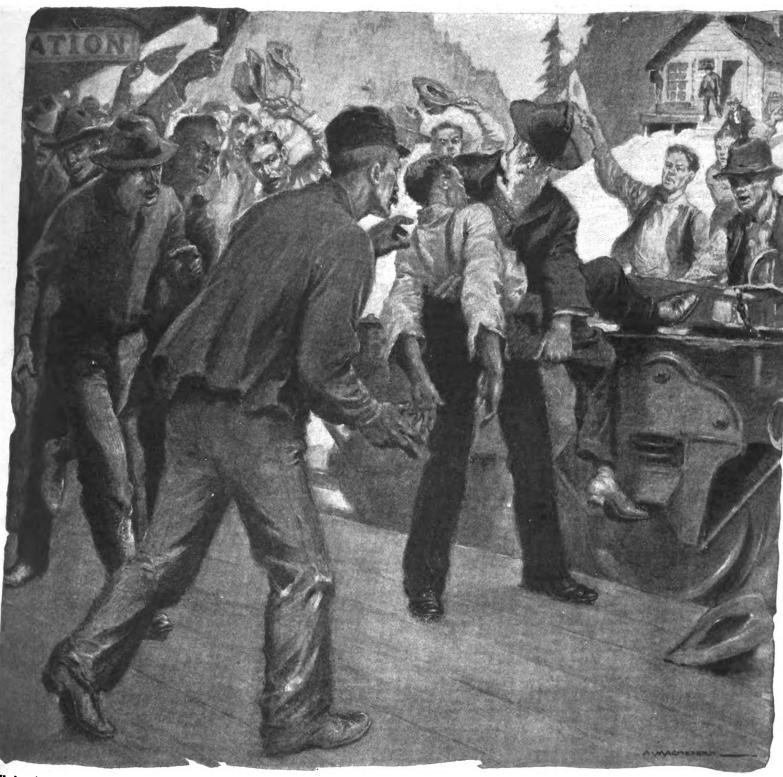
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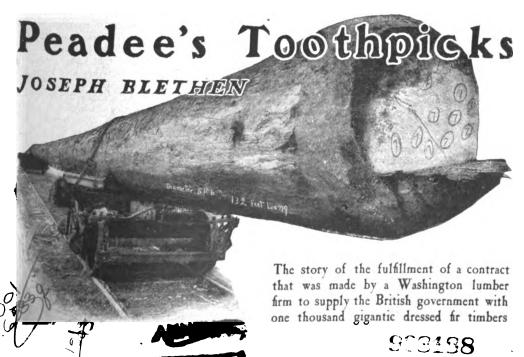
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Number 104



"He heard a pandemonium of voices. Then he felt strong hands on him, and turned to see that Peadee—the great Peadee,—was lifting him from his truck "



It was natural for The Tender to wander up and down the coast waiting till the king should be ready to accept it and by his acceptance turn it into a contract. As surely as the image of Cæsar stamped on a slug of gold made that gold a coin of the empire, just so surely did the conditions of The Tender mark it as a Peadee proposition. His ability to accept it crowned him the greatest lumberman on Puget Sound

to accept it crowned him the greatest lumberman on Puget Sound.

The Tender came out of the Orient. It was dated at Hongkong and bore the stamp of King Edward's department of navy yards and docks. It was broad-shouldered in its scope and very British in its conditions. One thousand monster sticks were required to complete a huge dock and warehouse,—"One thousand sticks of Oregon pine, sound and straight, each one hundred and twentyfive feet long and eighteen inches square." Surely, it was a tender for the attention of a lumber king! "To be delivered on shipboard within sixty days of signing of contract," continued The Tender, thus letting many little men have a good excuse to pass it on. The time limit was too short, they said, and then naïvely asked why the British navy could n't splice timbers in its dealer.

navy could n't splice timbers in its docks.

The Tender was sent to every prominent mill

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on the Pacific coast of North America. The Canadian fellows said they were too busy loading rough lumber for Johannesburg. The Johannesburg. The California men took the words "Oregon pine" literally, and were glad of an excuse to pass The Tender along. That left Washington and Oregon to look The Tender in the face and listen to its terms, for "Oregon pine" is a general title that was given to the timber of the northwest coast of Uncle Sam's

"Young Bannon had ridden more than one truck, and had winched many a clumsy hand brake on the grades"

domains when all that land was Oregon Territory, and it means Oregon pine at Portland, and Washington fir at Seattle, and a stick of it by either name will sustain, balanced on its tip, a mogul locomotive.

But the Oregon fellows lacked one necessary

condition for a successful bid; namely, a railroad. So they were glad to escape under the pretext of the time limit. Then The Tender, finding itself drifting around Puget Sound with no one anxious to tackle it, began to feel its own importance. Certainly it had become an identity, for the entire coast lumber trade was speaking of it as "that tender from Hongkong." There were many mills tender from Hongkong." There were many mills big enough to saw the sticks; there were several mill men who owned standing timber of the re quired dimensions; but only one man owned mill and timber and the necessary connecting link,—a railroad. Peadee, the grizzle-bearded lumber king, who perpetually carried the odor of new cedar in his clothing, owned all three. His mill was big, although there were other men on the Sound who bragged of bigger; his timber was extensive, though others owned spars as long as his towering firs; but his railroad made him independent of any middleman, and enabled him to take as a plum a contract in which other big mill men saw a dangerous element of chance.

"Suppose I sign that offer," said one mill man; "it is good, big money. I have the mill and I have the timber. But as soon as the order goes out to the big woods for a thousand big logs, just so soon does the walking delegate corner me. Up go the wages of choppers, or there's a strike on the railroad, or a shortage of cars, or some-thing. No, I'll not accept the chance. Pass thing. No, I II not accept the chance. I assit on to Peadee. He owns a railroad. Let him wrestle with rolling stock and jolly the Ancient Order of United Wood Chioppers. I'm busy cutting carsiding for the Burlington Railroad.

But Peadee was in no hurry, and the British department of navy yards and docks recalled its tender and made a new offer. "All or part of one thousand sticks, each to be one hundred and twenty-five feet long and eighteen inches square," said the amendment to The Tender. But the time limit stood, and no one budged to accept it. Then the head of the department sent to the British vice consul Seattle to know if all the Yankees were asleep. The vice consul knew his territory and advised the department to annul The Tender and to ask tenders from the Yankees.
The department was disappointed. It had expected a scramble on the part of the big timber men,—one of those battles of bidders which would mean low prices. But, finding the market too strong, the department took off its hat and asked for tenders, bids for all or a part of the one thousand sticks being requested. Then Peadee, satisfied that his opportunity had come, wrote an offer, naming a price of two hundred dollars a stick, with the time limit ninety days, and a condition that he should get the contract for the entire one thou-

The department waited two weeks, and then. not receiving any other offers, cabled the vice consul to know if "Peadee" was the name of a timber trust. What the vice consul said is of no consequence, save that the tenor of it was that "Peadee" was a very busy man to whom all governmental departments looked very much alike. The department promptly sent blank contracts in care of the vice consul and asked for a bond. Peadee arranged the

bond with the agent of an American surety company, and then added a premium clause to the contract by which he would receive a bonus of one hundred dollars a day for every day saved on the delivery of the last stick on shipboard. He figured that this would repay the premium on the Then, while the vice consul was getting permission of the department to add the premium clause. Peadee called a conference of his captains. to consider "the biggest bunch of toothpicks ever sawed on the Coast." It was a way that Peadee had of getting his forces interested.

The big Peadee plant was at some distance from the city which claimed Peadee as one of its leaders, yet, in the main office, built on a slight elevation back of the mills, its windows overlooking roofs, smokestacks, yards, and docks, the big man transacted the bulk of his business. He liked to watch the life in the yards, from the dumping of the great logs into the boom to the loading of lumber on cars under the sheds or on sailing vessels in the docks. The voices of the saws talked to him. The whistles of the locomotives on his logging trains were like the shouts of faithful The rigging of the ships that lay at his wharves delighted his eye. The fire drill at five o' clock in the afternoon, when the great nozzles on the standpipes sprang into life and the mill roofs received their daily soaking, was the signal for the big man to go home. The mills were his life, and his delight in them was shared only by his joy in cruising in the big timber. He was rarely found

"He saw a confusion of logs. wheels, and chains"



at the retail offices in town; he figured his contracts in the little office overlooking the mills.

To this office, for their conference, came Bixby, super-intendent of the mill which would be called upon to saw the thousand sticks; Conant, superintendent of Peadee's thirty miles of railroad; and Chinn, superintendent of the logging crews. Then Peadee read the contract to them and asked their advice about signing it. Chinn, who had

gone into the woods when The Tender first came from Hongkong and marked one thousand of the best trees to be turned into sticks one hundred and twenty-five feet long, remarked that on three days' notice he could load twenty logs a day, ten for the noon train to carry down the hills to the coast, and ten for the night

"Understand, Chinn, that we have other contracts on hand, and these big sticks must come out of the woods as only a part of the day's work,' said Peadee.

"Yes, sir. I have figured the men, the tools, and the trees. I can furnish the present output of logs right along and add twenty of these big boys on each working day."

Peadee looked at Bixby. "All ready, sir," said the mill boss. "I plan to put Tarbox on the big saw. He's the best judge of logs we have and will saw long sticks with the least waste of any man I know. I think we had better offer him a premium of one dollar on every stick that passes the inspector, and tell him he must run Chinn's twenty logs out each day, whether it takes six hours or sixteen. You will find that he will turn nine logs out of every ten into perfect sticks, and saw the waste into long planks that can go into the floors of those new docks at Seattle."

"Nine out of every ten," said Peadee, with another glance at Chinn.

"I have one thousand trees spotted now," said Chinn at once, for he understood the look; "I will spot more as we get into the contract."
"The British vice consul says he will have

ships here to load as fast as we can cut," said Peadee. "So there will be no choking up of the docks. If Chinn can log twenty of these trees a day, and Tarbox can turn eighteen of them into sticks, we can do the contract in practically fifty-six working days. This is really about ten calendar weeks, counting Sundays. Call it seventy days, for an illustration. That leaves twenty days' premium under the contract. I'll divide the premium equally between you three. Now, Conant, what about your equipment?"

There was silence for a moment, before the superintendent answered. Every man in the room knew that those twenty monster trees would be a strain on the men operating the thirty miles of railroad—thirty miles of steep grades and sharp curves from tall timber to tidewater,—over which the logs must come to the mill. They knew that Conant would do what he promised; but they also knew that he was aware of every weak spot in the road, whether it might be a shaky trestle, a wornout log truck, a cranky locomotive, or a balky train conductor. Indeed, if any trouble was to be feared in the carrying out of this \$200,000 contract, each man in the room knew that it would be—nine chances out of ten,road trouble.

"I can do it," said Conant, slowly; "but it will be a strain, and every time a wheel slips I shall jump for fear of a general tie-up. We are hauling very nearly our capacity now. Our trucks are in constant use, with hardly time to be given proper inspection. Our engines are hauling their capacity up the grades, and on the down-grades, from the summit to these yards, such big logs will be all they can hold. We shall have to break the trains in two in the yards, and let three loads at a time go down the last hill to the log landing. train of those big logs ever got away on this Digitized by

side hill of ours, it would rip the mill and the wharf it stands on clear out of the mud when it struck them. I have a fine set of men operating the trains, but they hate these big logs. On trestles and around they hate these big logs. On trestles and around some of those curves above Sumas a hundred-andthirty-foot log is either sticking into the bank or hanging so far out over nothing that a crew gets nervous. Besides, it's hard to keep the ends of a

big log down to the trucks. We shall be pulling trains apart, if we don't run mighty carefully, and a long log, when it hits a curve, twists its trucks till it seems as though every wheel is due to run off the rails. Ten of those logs means a train thirteen hundred feet long at the least. The length and weight is all a big six-wheel engine can handle. That means two trains a day to haul these big logs alone; that means two trains over and above our present schedule. It means putting the system under a strain. If every-thing works well, all right; if any little thing goes wrong, it is apt to spread into a general snarl just because we are under a strain. I can see half of those twenty days lost under the weight of the extra work. But with fair luck I can haul those logs in eighty days, by working Sundays and all."

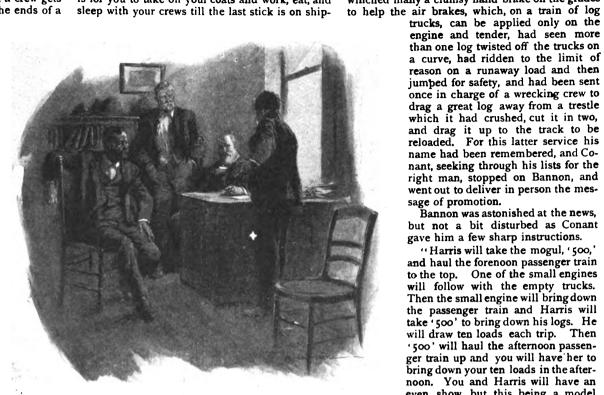
Peadee was looking out of the The bay was calm, and, windows. nearer in the mills showed their busy life. It had been a proud thing to force the British department to come to his terms, while all the lumber trade looked on and envied him. He knew, even before he had summoned his captains, that the contract would be a strain on the Peadee institution; but strains are the tests of strength, and the name Peadee stood for accom-

The great plishment wherever it was known. man knew well that every unusual performance is attained by a strain, sometimes long and dogged, sometimes short and sharp. He knew that this contract was the biggest individual order for large timbers ever recorded on the Coast. It would be a proud triumph for Peadee to cut, saw, and deliver those sticks on time,—prouder still to earn a premium. As he looked over the calm water, where a wave might rise and ride straight away to Hongkong, where these sticks were to be delivered, he was thinking that the best way to nerve his men to undertake this strain was to let them look squarely at the hardest end of the task first, then excite their enthusiasm to get the work accomplished. Sometimes, when he was younger, he had urged men through a crisis by belittling the obstacles, but now he knew a better way. He let them feel the full weight of their responsibility, and then they were proud to bear the burden to win a new victory for Peadee.

"I remember that once, when I had some money up on a football game," began Peadee, slowly, "my side won, and I pranced out of the grand stand feeling lots bigger than I do over this contract. I ran out of the grounds to jolly up with the winning team, but I couldn't get nearer than one of the substitutes. So I grabbed him and proceeded to congratulate him on the brilliant victory. Of course, I was thinking of my money. He was thinking of the fact that he had not been in the play. 'Not much of a game,' said he; 'only two were injured.'

"Now, that's the way you are looking at this contract, Conant. You are figuring on losing a little sleep, and on working your crews Sundays. That's tame, in my estimation. I figure on your putting in a lot of night work and running the whole system overtime whenever Chinn gets an extra train load of logs ready. Then I expect extra train load of logs ready. Then I expect Bixby to lock the yard gates and clear up all the logs you deliver before he lets a man go home from the mill. When I figured the price of the sticks I put in something for overtime, something for wear and tear, and an even thousand dollars for wrecks on the railroad while hauling logs. will allow you five days out of that twenty for de-lays. But I shall expect this contract to be consummated in seventy-five days. That will earn fifteen days' premium, or five hundred dollars each for you three. Now, it strikes me that, if we work this right, we can find plenty of the boys who will be up and a-coming for some of that British money on their overtime slips. Moreover, while I am expecting a thousand dollars' worth of wrecks for the simple reason that the boys can

wreck that amount on Johnny Bull's money, yet I shall expect you to keep an eye on the figures and see that they do not throw any wrecks over the limit and lop off some of the old man's profit on the big job. And you fellows know that the best way for you to get that five hundred dollars each is for you to take off your coats and work, eat, and sleep with your crews till the last stick is on ship-



"Ten of those logs means a train thirteen hundred feet long at the least"

board.—till the job is finished and out of the way.' He paused a moment, and then asked:"What do you think, Bixby?"

"I'll saw all the logs Conant can haul," came the prompt answer.

"What do you think, Conant?"

"I'll do it in seventy-five days. But I warn you all that everything on the road, even to that overtime account, will put in slips for extra pay.' "And how about your trees, Chinn?"

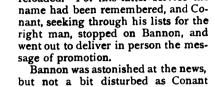
"Give me three days' notice, and my wife gets that five hundred dollars," replied the woodsman.

Then, while the three captains felt their pulses quicken and heard the blood roar in their ears, the grizzle-bearded Peadee signed the contract and gave the order to have logs ready to saw in three days. In a moment the news began to leap through the mill. From the mill it spread to the yard, from yard to trains, from trains to camps; and that night even the most distant chopper in the biggest woods knew that the order had gone forth. The men who composed Peadee's indus-

trial army smiled as they heard the news, and in thought they said, "The old man has nailed that British coin;" and from the commander himself, up in the head office, to the last dishwasher in the camp, the one topic of conversation was "Peadee's toothpicks."

On the next day, Superintendent Conant looked at the list of his train crews and found but two conductors available to be put in charge of the two "toothpick" trains. One of these men frankly declined to attempt the hauling of any such long timbers around the curves of Peadee's side-hill railroad, and Conant, desiring to put only such men on these trains as would wear their hearts on the very logs which they were hauling, passed him by and promoted a young brakeman named Bannon.

The great logs were to be loaded on trucks by the same crew that felled them. The train crews were to gather the loaded trucks from the numerous spurs,



a curve, had ridden to the limit of reason on a runaway load and then jumped for safety, and had been sent once in charge of a wrecking crew to

drag a great log away from a trestle which it had crushed, cut it in two,

and drag it up to the track to be reloaded. For this latter service his

making up a train on the main track, load by load, till the limit of weight was reached. The

trains would then creep away down the grades, creaking over trestles and straining around curves, till the log landing at the mill should be reached. Young Bannon had ridden more than one truck, had

winched many a clumsy hand brake on the grades

gave him a few sharp instructions. "Harris will take the mogul, '500,' and haul the forenoon passenger train to the top. One of the small engines will follow with the empty trucks. Then the small engine will bring down the passenger train and Harris will take '500' to bring down his logs. He will draw ten loads each trip. Then '500' will haul the afternoon passenger train up and you will have her to bring down your ten loads in the after-noon. You and Harris will have an even show, but, this being a model railroad that runs no trains at night, you can have all night to clear up a

wreck, while a wreck on Harris's shift would mean a tie-up. As you are the new man, we will let Harris have the hard end of it."

The habitual humor of a railroad man lit Bannon's eye. "So you think I will draw the wrecks?" said he.

"Not all of them," said Conant. "But when Harris has a wreck, you will get a chance to put in a lot of overtime hauling his logs,—and, by the way, Peadee said that ten logs are a day's work for each crew; all over that goes as overtime, and all overtime on these 'toothpicks' is to be paid for. When you haul a load for Harris, it's to your credit on the overtime book. If he gets a chance to pull you out of the ditch, it's a swell to his pay check. But along about eight weeks from now, when the end of this contract is supposed to be getting in sight, you will both be pretty apt to get orders for an extra trip on alternate days. your equipment in as good shape as possible so as to get all that overtime you can."

"All right, sir. Can I go up the line to-day

and pick out my trucks?"
"Yes. This is Tuesday;
you take '500' at the upper end at 2:00 P.M., Thursday, for your first trip down. Meantime, if you want to work around the spurs and pick out trucks, I'll tell Beals to pass you up the line to-day.'

Thus it happened that Chinn, the superintendent of the camp, and Bannon, the new conductor, went to the upper end on Tuesday afternoon's train, the one to commence the loading of his long sticks, the other to beg, bluff, and cajole the loading crews to put the sticks on the strongest trucks.

Going up to the very end of the line, where the close or the line, where the close standing firs flanked the track like solid blocks of fireproof sky-scrapers, Chinn disappeared in the direction of the farthest camp. For months before, Chinn had searched into the wooded depths, where the summer sun only checkered the green carpet, and there he had located giant firs that were



"A young brakeman named Bannon"

more in diameter than twice his own height; giants that towered above him, up and up, till the watching eye blurred and the brain became dizzy; giants which weighed more than an army of men and could make lumber to house a village; grand monuments of a divine purpose, yet a prey to the tiny human thing who stood hidden to the shoulder by the brakes and ferns that grew about their roots.

Chinn's problem had been one of selecting a particular form of trees from the many large ones in Peadee's woods. There was no trouble in finding trees that were as long as the Empire State Express. But the weight of such trees made it impossible to handle them unless sawed into monster logs each many feet thick and the length of a flat car. Chinn's task was to find comparatively slender firs that were

straight and true, and not too heavy to be transported bodily from the forest to the mill.

The men who chopped were sociable giants, and their chief soon filled them with enthusiasm for The felling of the "toethpicks" was their task. comparatively easy for men accustomed to bring down the giants of Peadee's woods; but the drag-



'The close-standing firs flanked the track like solid blocks of sky-scrapers

ging of the long sticks to the loading track was very difficult, and every man, from the chopper to the master of the logging engine, which wound the cable on its drum and drew the big logs to the track, had to be in tune for the task.

The choppers, attacking a tree which Chinn had marked as a "toothpick," hewed at a line

ten feet above the ground, in order to avoid the thick pitch that mats the bottom of a fir. To fell a tree that is eight feet thick at the point of cutting is a science, art, and occupation of danger. A great notch is hewed in the tree to a quarter or perhaps a fifth of its thickness. Then the men go to the opposite side of the tree and cut through with their great crosscut saws till the saw nearly meets the Then wedges are driven notch. in where the saw has cut, and the tree falls toward the notched side.

When the great tree has crashed down to the floor of the woods, the choppers quickly trim off those few branches that ride the trunk of the fir, and cut off the useless, brushy tip of the tree, and the log is ready for the cable man and the slow, powerful drum which draws it to the loading track. When it arrives there, the log is rolled up a skid-

way that brings it level with the top of the trucks, which are placed ready to receive their burden. A "toothpick," when loaded on trucks, holds them in place by its weight. The log itself takes the place of the floor of a car, and the pull of the locomotive runs through log after log till the end

[Concluded on pages 50 to 55]



he Senators elve ower

Walter Wellman come very near to holding in their hands the reins of government of this great republic of ours. We are fond of dreaming over our old dream that this is a democracy and ours the rule of the people. Of course it is a true dream, in the long run, and in the last analysis. Perhaps there never before was an era in the history of the nation when public opinion exerted such sharp and commanding influence upon the government at Washington. Actually, the country is ruled nowadays by a few hundred men who sit at night by electric bulbs in the top stories of tall buildings, write words on paper, send the written sheets to other men who operate magical typesetting machines, and who in turn send the metallized lines down to the basement, where still more wonderful machines print them millions on millions of times. It is true that we have government by public opinion, and a public opinion led and molded by the newspaper press. But all this majestic power has to be delegated to some one. All these electrical forces of a mighty people have to be gathered in a dynamo, or converter, for practical use and expression. All the wires lead to Washington,—to the White House and the halls of

IT is a somewhat startling fact that a dozen men

Without the Aid of the Senate, the President Would Be well-nigh Powerless

When we go to that city to inquire how the machinery works, how these tremendous, transmitted forces are taken up and put into the policies and the laws which lead and rule the nation, we find a dozen men with their hands pretty firmly gripped upon the controlling levers. They are not absolute; they are not dictators; the machine can be run without them; they may be, and sometimes are, pushed aside. But, year in, year out, they manage to exert an influence which is really one of the steadiest and most powerful factors in our national affairs. It has already become axiomatic that ours is a government of the senate, by the senate, and for the senate; and no one knows better than the man behind the scenes in Washington how true this is. Why and how the senate has attained this commanding place is another story; it is enough here to say that it is now something

more than a coequal partner in the legislative It is superior to the house of representabranch. tives; the house proposes; the senate disposes.

the president, the senate is his executive council, his board of directors: and without its aid and cooperation he is well-nigh powerless. He must make sure of its support, must defer to it, must consult it. His cabinet he may command, but the senate he must placate. Theoretically, the executive has veto power over the senate; practically, it has the veto power over him. Superior to the house, more powerful than the president, the senate is the central, vital, dominant part of the machinery of government.

A Newcomer in the Senate Must Move slowly: Length of Service Counts

A dozen men have their hands on the controlling levers. In saying this there is no belittlement of the others, no disparagement of their ability or forcefulness. The dozen is a coterie which changes and shifts; some of the men of the ineffectual majority of to-day may be members of the effective minority of to-morrow. The senate is probably the queerest legislative body on earth. It is unique. Nominally founded on the democratic principle of majority rule, where one man's vote is as good as another's, actually it does very little business in that way. The senate has its own peculiar traditions and unwritten laws. Most of them work to enhance the influence of the few, to keep the many on dignified probation. The senate is more than a legislative body,—it is a club, and in it, as in most clubs, are found obscure members and prominent members, those who have little to say and few to listen, and those who have much to say and everybody paying respectful heed. Force and genius will come to the front in the senate, as elsewhere; but in the senate newcomers must go slowly. Experience and length of service count for much. Not all can be leaders, and twelve are enough out of ninety. The others must wait; and, while they are waiting, they find themselves surrounded by the most skillfully devised and firmly established rules, some written but chiefly unwritten, designed to keep them in their places, to preserve in them proper humility and steady deference to the more fortunate dozen. Woe to those

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who kick over the traces and refuse to bow to the system; they must wait the longer, or forever, before gaining for themselves the right to sit among

Who are the dozen immortals of the chamber at the present moment, the apostles of the sanctum sanctorum of the United States Senate? It is a delicate question to answer. Opinions will differ as to the formation of this list, even among the most disinterested of expert observers, and the differences of opinion found among the men chiefly concerned, the senators themselves, would probably be so great as to make half a dozen dozens necessary. In venturing on the unwelcome task of naming my dozen, humbly begging the pardon of the many whose toes I tread upon in assorting out the chosen few,—I wish to shield myself as much as possible behind the wholly proper reservations that the controlling coterie shifts to some extent as questions under consideration shift, as shall be hereinafter explained, and that numerous senators are already so near to having earned a rank among the immortals that, by their friends, if not by themselves, they are even now regarded as being there. These understudies and promising candidates for early calling to star parts shall also be put upon our roll in the proper place. Judging by average performance, by degree of continuous influence upon the general run of policies and legislation, I name, as the twelve men of power in the senate of the United States, the following:-

The Twelve Leaders, and the Scope and Variety of Their Individual Powers

Nelson W. Aldrich, of Rhode Island; William B. Allison, of Iowa; Albert J. Beveridge, of Indiana; Shelby M. Cullom, of Illinois; Charles W. Fairbanks, of Indiana; James B. Foraker, of Ohio; William P. Frye, of Maine; Eugene Hale, of Maine; Marcus A. Hanna, of Ohio; Henry Cabot Lodge, of Massachusetts; Orville H. Platt, of Connecticut, and John C. Spooner, of Wisconsin.

All these, it will be noticed, are Republicans, and properly so, because the Republican party has about two-thirds of the whole membership of the senate, and is, therefore, all-powerful and responsible in the body. Were the Democrats in the majority, the list would have to be greatly changed. It will also be observed that the roll is called alphabetically, for the task of naming the order of precedence is a more delicate

one than the writer would care to enter upon.

Calling now the roll of eligibles or understudies, several of whom, on some questions, are fairly entitled to a place in the first instead of the second rank, I name again, in alphabetical order:-

Augustus O. Bacon, of Georgia, Democrat: Joseph W. Bailey, of Texas, Democrat; Julius C. Burrows, of Michigan, Republican; Edward W. Carmack, of Ten-Michigan, Republican; Edward W. Carmack, of Tennessee, Democrat; Charles A. Culberson, of Texas, Democrat; Jonathan Prentiss Dolliver, of Iowa, Republican; Stephen Benton Elkins, of West Virginia, Republican; Jacob H. Gallinger, of New Hampshire, Republican; George Frisbie Hoar, of Massachusetts, Republican; James K. Jones, of Arkansas, Democrat; Louis E. McComas, of Maryland, Republican; John Tyler Morgan, of Alabama, Democrat; Matthew Stanley Ouay, of Pennsylvania. Republican: Redfield Proctor. Quay, of Pennsylvania, Republican; Redfield Proctor,

of Vermont, Republican; Henry Moore Teller, of Colorado, Independent; and Francis E. Warren, of Wyoming, Republican. Perhaps it would be accurate to say that the legislative policies of the Republicans are determined by the dozen of the first list after consultation with their party colleagues of the second list. Certain is it that nothing of importance can be done in the senate without the sanction and the substantially harmonious agreement of the dozen men whose names head the column.

One of the most powerful men in the senate is Aldrich, of Rhode Island. As chairman of the great committee on finance, no action affecting the revenues can be taken without his consent. Known for years as the chief high priest of protection, his performance has vindicated his title. He is the great tariff-maker of the senate. None other is so well informed as he in all the intrinaccies of the customs schedules, magic figures where the change of an innocent-looking numeral, or even of a fraction, or sometimes the omission or insertion of a little comma, means a fortune won or lost to someone. Aldrich is suave, alert, smart, sometimes mysterious, and always single-purposed. That purpose is to see that protection is preserved in season and out of season in the house of its friends for its friends. Everything is bent to the end in view. Aldrich's hand is often seen; oftener it is invisible. He is crafty, burrowing, never-sleeping. A senator has a pet measure. He presses it with all his power. There seems to be no active opposition to it. Yet it fails to get ahead. Some mysterious influence blocks the way. If he is experienced, if he is smart, if he knows the ropes, the senator will go to the chairman of the committee on finance the ropes, the senator will go to the chairman of the committee on finance and make his peace. He will sign a treaty of alliance. He will promise to be good. He will pledge himself to be by Aldrich's side when Aldrich

Aldrich is the greatest politician of the senate. Sooner or later he has his finger in every legislative pie. Often his is the actual controlling power when few if any suspect that he is bestirring himself. He has the consummate art which enables him to exert tremendous influence when to all outward appearance he is wholly quiescent. To him the senate is more than a legislative body, more than a club; it is a chessboard upon which he loves to move the pieces without showing his hand. He is never in a hurry; never anxious or eager; never seems to be mixing in other people's affairs. He sits quietly at his place, a picture of calm indifference; and, when he moves about, it is to drop down beside this senator or that for a casual word or inquire. The same has a little chart that he sows his or inquiry. It is with these casual words, these little chats, that he sows his

"Hanna is the antithesis of Aldrich, for he never burrows or advances through indirection. Everyone sees, always, just what he is trying to do"

seed. He knows men, knows everyone's weakness and strength, knows each senator's dearest hope and most poignant fear. Give him a little time and he will have full information as to what everyone else is up to and

scarcely anyone will have any information as to what he is up to. But he

knows, and in the end he usually gets his way.

Men who think they are running things suddenly awake to a realization of the fact that they have reckoned without some one. There is some one they must see and reach an understanding with. This is Aldrich. The Rhode Islander is one of the most interesting characters ever seen in the senate,-a character worthy of a place in the future great novel America.

Aldrich, the Indispensable Senator, Has Won His Place through His Genius

When Senator Aldrich is n't playing his hand with a definite, practical purpose in view, he plays because he loves the game. When he does play with a practical purpose in mind,—which is most of the time,—he has two sources of inspiration and spurs to endeavor. These are found, first, in the interests of his own New England, which thrive upon the tariff, and, second, in that mysterious but mighty thing which in Washington we call simply "New York." There is no man in the senate in closer touch with New York, by telegraph, telephone, and frequent personal visits, than the senator from Rhode Island. Leaving politics and appointments out of consideration, New York could dispense with Platt and Depew if Aldrich were still on deck. Aldrich has made his place in the senate through his genius, and his place is this: he is the indispensable man; he can't do everything he

wants to do, but nobody can do anything without him.

Allison, the "Father of the Senate," is known as Aldrich's "side-partner." They are as unlike as men can be, and perhaps this is the reason they get on so well together. For years they have been chums, and together have wielded an almost commanding influence in the senate. Often their purposes and interests appear to be directly antagonistic, but in the end you will usually find them working hand in hand. They have been called the "senatorial engineer and fireman." Aldrich must be the fireman, because he controls the taxing power which puts billions into the national fuel-box to make the steam which keeps in motion the innumerable wheels of governmental activity. As chairman of the great committee on appropriations, Allison sits with his hand on the throttle, turning the steam on or off as he likes. At any rate, these two men come very near to running the machine.

Aldrich likes money, and has ten or fifteen millions. Allison is poor and wants only enough to pay his moderate expenses. Aldrich decides how government money is to be raised, who shall contribute most to the taxgatherer; Allison decides how it shall be spent. By his care and patience he has saved millions to the government of the many billions that have passed under his eagle eye. He is sweet and gentle. All his methods are soft and smooth. Ingalls once said of him that he could don hobnailed shoes and walk over a tin roof without making enough noise to frighten a mouse. He is also known as the man who never expresses a positive opinion upon any subject whatever. This is merely a way of saying that he minds his own business and wastes no energy in declamation. But his case is proof that even in our day and generation a gentle man may be a positive force, for Allison is a force in the senate. Men follow him through love and respect for him; they know him to be conservative, unself-ish, without outside "connections," an ideal senator. As chairman of the senatorial Republican executive

committee he is not only the father but nominally the leader of the senate; and he is a much-loved veteran of the body wherein, on March 4, next,

he will have served for thirty years.

Decidedly a power in the senate, as he is everywhere he goes, is Mark Oddly enough, Hanna is stronger now than he was a year or two ago. Then there was a little jealousy of him on account of his membership of the kitchen cabinet at the White House. The senate, remember, proceeds always upon the theory that it is supreme; and not even a president may dictate to it or seek to manipulate it through a backstairs agent. With the change at the White House, Hanna stands on his own merits, and these -frankness, good humor, common sense, courage, and of late a power of expression which has made him almost an orator,—have given him high rank. He is seen to be solar, not lunar. Now he has power and influence second to none in the senate; and this is because he is Mark Hanna, not on account of anyone else. Hanna is the antithesis of Aldrich, for he never burrows or advances through indirection. Everyone sees at all times where he stands and what he is trying to do. No longer is he suspected of self-ishness, or scheming, or of curious methods. The man with dollar marks all over his ample person is dead, and in his place is the man who wears American. This means simply that Hanna has come into his own; he is known now, and is no longer a misunderstood man. An interesting and instructive side light upon the character of Hanna is seen in the fact that he is now the most popular Republican on the Democratic side of the senate chamber, the majority senator who has the greatest influence with the men of the minority. One of the greatest triumphs ever won in congress was that which Hanna achieved with his Panama Canal Bill. his campaign all but five senators favored Nicaragua; but, when the roll was finally called, he had a majority of eight.

Probably the most brilliant man in the senate is Spooner, of Wisconsin, the "Little Giant." He is wise in council, powerful in debate, not a specialist, cyclopedic in his activities, always ready to fight or work, secure in the confidence and admiration of his associates. Though he is the senate's greatest debater, it is not upon that alone he has made his reputation. Mere speech-making never gives one greatness in our house of lords. much of it may hurt him, as many an ambitious fledgeling has learned to his sorrow. Spooner occupies this proud place in the senate: when the dominant dozen are to decide upon a policy in cloakroom or committee-room

confabulations, no voice carries more weight than his; when an understanding is to be effected between what are known in Washington as the "two ends of the Avenue,"—the White House and congress,—Spooner is sure

first of all agencies tending to success promptu debate he is very incisive "

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Nothing, indeed, but the possession of some power can with any certainty ever discover what, at the bottom, is the true character of any man. Power brings to light many qualities and aspirations that would have died with youth.-Edmund Burke



Lodge's career has shown that the in statesmanship is brains. In imto be one of the three or four committeemen of adjustment and agreement; and, finally, when the Republican policy is at length decided upon, and some one is to undertake the task of exploiting and defending it on the floor, meeting and baffling the attacks of the alert opposition, Spooner is sure to be the spokesman upon whom most depends and of whom most is expected. He never disappoints.

whom most is expected. He never disappoints.

New England makes a brave showing in the list of the elect. Aldrich has already been mentioned. Frye of Maine,

the presiding officer of the senate, and his colleague, Hale, are wheel horses. Both are senators of long experience, both great debaters, and both shine also in the conservative work of committees. Lodge, of Massachusetts, known to much of the country as "the scholar in politics," and to his associates in Washington as "the politician in letters," holds in the senate a place unique. Not very popular personally, cold-blooded, perhaps selfish, his genuine ability has swept away all obstacles. His career has shown anew that the first of all agencies to success in statesmanship is brains. He has steadily risen till he is now near the top. He writes some of the best speeches ever heard in congress, and delivers them in a voice which rings like metal. In impromptu debate he is ready and incisive. Supposed by many to be President Roosevelt's personal representative in the senate, Lodge tries his best not to justify the supposition. Mr. Roosevelt needs no other spokesman than himself, and in the senate Mr. Lodge is strong enough to stand upon his own merits. In Washington, the latter's status at the White House is well understood. No other senator is so often or so much with the president; but this intimacy is purely social and personal, —the continuance of many years of chumship.

Next to Aldrich the greatest New England senator, all things considered, is Platt, of Connecticut,—"the wise old man," as they call him in the cloakrooms. All knotty questions are referred to him; and, if he cannot straighten them out, he calls upon his friend Spooner for help. Probably these two men together have burned more midnight oil whilst working out such delicate problems as those relating to Cuba and the Philippines than any other pair of senators now working in harness. No other senators are summoned oftener than Platt and Spooner to the White House for consultation; and this was as true under McKinley as it is now with Roosevelt. Platt is a shining example of senatorial methods: his influence is in committee rooms, in conference, in the counsels of the coteries or caucuses of his party, where the man with the longest head, not the one with the loudest voice, commands most attention.

The Difference between "Platt of Connecticut" and "Platt of New York"

As Aldrich and Allison are partners, so are Platt and Spooner; and, if the latter were in a law firm together, Platt would spend all cf his time rummaging around among dusty books, while Spooner would be shaking things up before judges and juries. The case of Platt also calls attention to the fact that now and then the country fails to recognize at their true value all its worthy servants. Speak to the average American citizen of Senator Platt, and he is pretty sure to call to mind Platt of New York, and to overlook altogether Platt of Connecticut. The first-named is a great power in the state of New York, but in the United States senate he is of small importance. It is a curious fact that two of the best-known and most puissant men in the poli-

CLARK



They that govern most make the least noise. It is the wise man who sits in council and says little

tics of the country—Platt of New York and Quay of Pennsylvania,—are very seldom considered as factors in the senatorial equation. Their influence in it is chiefly confined to such as is found in responding "yea" or "nay" when their names are called by the tally clerk.

Hoar, the "Old Man Eloquent," one of the finest

the wise man and says little

Hoar, the "Old Man Eloquent," one of the finest characters ever seen in the senate, would occupy a conspicuous place among the men of power in that body were it not that, of late, and upon some important questions, he has been out of sympathy with his party. Hoar is too much of a

he has been out of sympathy with his party. Hoar is too much of a poet, too much a slave of conscience, to be a great senator in the practical sense. Despite this drawback, his influence is still very great, though not so great as the love and admiration which his associates give him. As a speaker,—as an orator of the fine old school,—he occasionally fascinates the senate and charms the country. Proctor, of Vermont, is another New Englander, sturdy, hard-headed, practical, who barely escapes inclusion among the dominant dozen.

Beveridge Did not long Suffer the Penalty for Pushing too soon to the Front

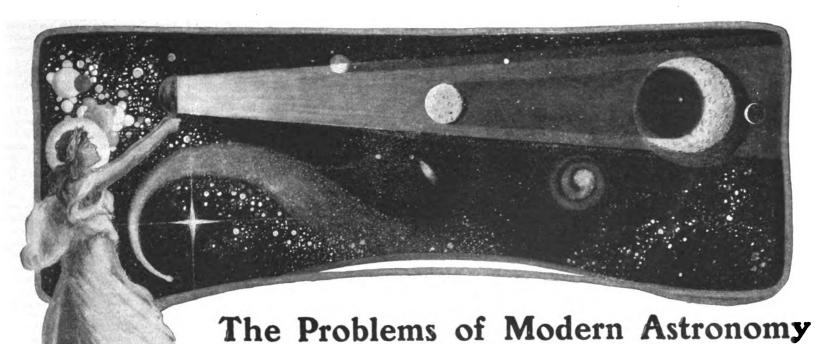
Cullom, of Illinois, is a veteran who has risen to the first rank through solid worth. He is classed as not brilliant, but safe, an admirable quality in one who sits as chairman of the committee on foreign relations, whose duties are so important, so peculiarly delicate. The two Indiana senators, Fairbanks and Beveridge, are comparatively recent comers who have made rapid strides, the former as a lawyer and business man of sound judgment, the latter as a brilliant orator and debater. A year or so ago, Beveridge was suffering the penalty for violation of one of the unwritten laws of the senate. He had tried to push too rapidly to the front, had made too many set speeches at a time when, according to the senatorial code, he should have been sitting modestly in the background. For discipline's sake he was snubbed by his fellow senators and forced once to speak to empty benches. But he lived that down by sheer force of brains and originality. Foraker, of Ohio, is another new senator who has risen rapidly. He is regarded as a great lawyer, one of the very best in a body of eminent lawyers, one of the three or four cleverest debaters in the chamber.

Elkins, of West Virginia, and Burrows, of Michigan, are senators who

Elkins, of West Virginia, and Burrows, of Michigan, are senators who come so near to the first rank that it is a matter of opinion merely whether they have not reached it. But for their opposition to the party majority last winter on the Cuban reciprocity question, their present influence in the senate would be greater than it is. McComas, of Maryland, and Warren, of Wyoming, are men who seem to be gradually winning their way through sterling common sense and close attention to their work. Dolliver, of Iowa, a new senator, is generally thought to have a fine career before him.

Iowa, a new senator, is generally thought to have a fine career before him.

On the Democratic side of the chamber are many able men,—Jones, of Arkansas, the leader of the minority since Gorman stepped out, and now preparing to surrender the responsibility to Gorman again when the astute Marylander shall make his reappearance next March; Bailey, the remarkable young man from Texas, who, in debate, is almost a match for Spooner; Bacon, the learned lawyer from Georgia; Culberson, of Texas, a rising youth; Teller, of Colorado, the eloquent advocate of free silver, and veteran statesman; and last, but by no means least, Morgan, of Alabama.



Charles A. Young [Professor of Astronomy, Princeton University]

PROBABLY astronomers were never more numerous or active. New subjects and possibilities of inquiry present themselves in all directions, and problems formerly hopelessly inaccessible are now brought within easy reach by the introduction of spectroscopic, photographic, and photometric methods. These have given us "the new astronomy." The work of mathematicians, though of extreme importance from a scientific point of view, is hardly suited to popular exposition. It is enough to say that this department of the science is by no means neglected,

and that men of the highest ability are busy with the lunar theory, the theory of planetary perturbations, and especially with the new problems of permanent, or so-called "periodic" orbits, which are possible in certain peculiar systems composed of more than two members. These investigations may prove to be steps toward the solution of the general, and hitherto unconquered problem of the motions of a flock of bodies, moving under the law of gravitation.

The leading problems of what may be called "terrestrial astronomy" are, at present, a more accurate determination of the earth's form and density, and of the irregularities of its rotation. The former is not neglected; but just now special importance attaches to study of the slight "wabbling" of the earth's axis, and the strongly suspected variations in the length of the day. These phenomena lie at the very boundary of possible observation. The greatest departure of the pole from its mean position, since its "wabble" was first detected, fourteen years ago, has been less than forty feet. It is studied only indirectly, through the infinitesimal changes in the latitudes of

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different observatories. But the motion, slight as it is, is now beyond question; and the investigations of Dr. Chandler have shown that, although apparently extremely irregular, as shown by figure I, it is, in the main, really governed by law, and amenable to calculation. The theory, however, is still imperfect, and in order to obtain the necessary data a chain of astronomical stations encircling the earth has been established by different governments. There are six of the stations, all on or near the parallel of 39° 10'. Three are in the United States, (one of them, however, the Cincinnati observatory, not being governmental,) one in Japan, one in Central Asia, not very far from Ulugh. Beg's mediæval observatory of Samarkand, and one on the little island of Carloforte in the Sardinian Sea. At these stations continuous observations of the latitude are to be kept up for at least fourteen years.

The problem of changes in the earth's rotation period is still more difficult, and also more important. If the length of the day is sensibly variable, especially if the variations are irregular, then our time-standard is untrustworthy, and precise prediction is impossible. Now irregular variations must necessarily result from geological and meteorological causes, to mention no others; the only question relates to their amount,—whether they rise to the limit of observability. It is certain that they do not crop out obviously; but minute discrepancies between theory and observation, which have been discovered in the motions of the moon and of the planet Mercury, excite strong suspicions. If the two celestials agreed exactly in the details of their testimony, we should be more cer-

tain, and should have to seek some new time-unit more constant than the earthly day. It is quite possible, however, that the discrepancies referred to may yet be accounted for without the necessity of discrediting the steadiness of Mother Earth. At most the unsteadiness of her rotation, if there is any, amounts to setting the sun-dial backward or forward five or ten seconds in fifty years. It is nearly certain that no day in the past two thousand years has differed from the average by a hundredth of a second.

The details of the lunar surface are now being minutely studied, and in this work photography is invaluable, preserving a permanent and indisputable record of the state of the things it images. As yet, however, it cannot rival the eye in dealing with the more delicate details. Figure 2 is from a magnificent photograph made at the Yerkes Observatory. The younger Pickering is at present the leader in this line of work, and has reached some

rather startling conclusions, which, if confirmed by further observation, will seriously change the accepted views as to the condition of the moon. He thinks he has detected snow and clouds upon the surface, and believes that he finds evidence of

Passing to the sun we find first among the top-ics of special immediate interest the closer determination of its distance. Here our knowledge is already surprisingly accurate: the sun's distance and parallax are now certainly known within about one half of one per cent., which on a yardstick would be less than one fifth of an inch. But even this corresponds to an uncertainty of nearly half a million miles in the distance of the sun. Though million miles in the distance of the sun. the actual error does not probably exceed half this amount, it is far too great to satisfy astronomers, who are "pernickitty" people and are now diligently calculating the results of the multitude of

observations, visual and photographic, made upon the planet Eros during the winter of 1900-1901. It was then nearer the earth than it or than any other planet under observable conditions will be again in thirty years. It is expected that the final result will be a considerable improvement in the

accuracy of our celestial scale of measure.

The physics of the sun is of immense importance, both in itself and as typical of that of the stars. It is engaging the attention of a multitude of investigators. Many of them are studying the solar spectrum in detail as compared with the spectra of terrestrial substances, and with reference to the minute changes which are continually occurring in it; others, with reference to the differences between the spectra of different portions of the solar disc, such as faculty and support April the readers of Success doubtless such as faculæ and sun-spots. As all the readers of Success doubtless know, the solar spectrum is a beautiful band of color, ranging from red at one end to violet at the other, and crossed by thousands of dark lines, most of which are due to the presence of the vapors of various substances in the solar atmosphere. Figure 3 shows a little piece of this spectrum as it appears in a powerful executed toward the sun. The lines that pears in a powerful spectroscope directed toward the sun. The lines that cross the spectrum (not its colors,) are the significant characters; and the modifications in their appearance, width, and darkness, (some of them even becoming bright at times,) are the indications to be studied, and are full of information. information. Young students find this a very profitable field of investigation.

In this, as in almost all other spectroscopic.

work, photography is an invaluable assistant, and indispensable in the operations of the so-called "spectro-heliograph" with which Hale at the Yerkes Observatory and Deslandres in Paris are studying the distribution of calcium and other elements in the solar atmosphere elements in the solar atmosphere.

One of the most interesting and perplexing of solar problems is that of the nature and cause



HIPPARCHUS STUDYING THE EASTERN HEAVENS
[Drawn by Egbert N. Clark, from an old print]

HIPPARCHUS STUDYING THE EASTERN HEAVENS [Drawm by Egbert N. Clark, from an old print]

Hipparchus was the first systematic astronomer on record. He was born at Nicæa, in Bithynia, about the beginning of the second century, before Christ. He was the first to classify the stars and to determine their position and magnitude. He was the inventor of the planisphere,—the method of representing the heavens on a plane. He originated the idea of marking the position of places on the earth, by circles drawn perpendicular and parallel to the equator. His instruments, as shown in the illustration, were but few and crudely manufactured.

still surviving volcanic activity.



-The sun's corona, May 28, 1900

of sun-spots, and the explanation of their distribution upon the solar surface. With this is connected the not less difficult ones of sun-spot periodicity and the mysterious correlation of these solar disturbances with certain terrestrial phenomena, a correlation perhaps less extensive than some maintain, but indisputable in the case of terrestrial magnetism. Data for these investigations are being accumulated by daily photographs of the sun made at stations in different countries. Another extremely important and difficult

problem relates to the measurement of the sun's heat, and especially to its possible (and probable,) variations. Even yet the "solar constant" (the amount of heat which is received from the sun in a minute upon a square meter of the earth's surface,) is extremely uncertain, different estimates varying one hundred per cent. The chief difficulty lies in ascertaining the effect of the air in absorbing the solar rays before they reach the measuring instrument, an effect always great and continually changing.

Total eclipses of the sun give the only op-

portunity for studying the sun's "corona," offer advantageous conditions for the study of the lower regions of the solar atmosphere by means of the so-called "flash spectrum," which appears at the moments when the total obscuration of the sun's disc begins and ends. Extensive preparations are already making for the observation of the next accessible eclipse, to occur in August, 1905, visible in Labrador and Spain.

The recent discoveries consequent upon that of the Roentgen rays, and the recognition of the-swiftly moving "ions" and "corpuscles" far smaller than the "atoms" of the physicists, seem likely to

throw much light on the phenomena of the corona, and the intercommunications between the sun and the earth, especially in connection with the newly-obtained experimental demonstration of the repulsive force of light. These circumstances add special interest to the coming eclipse. Figure 4 is the corona as photographed on May 28, 1900.

Turning now to the planets and passing with a bare allusion the important mathematical work now in progress for perfecting the theories of their motion, one may say, in general, that numerous astronomers are busily engaged in measuring their diameters, studying their satellite systems, and investigating their physical characteristics.

It is noteworthy that the most recent results seem to show that hitherto received estimates of the dimensions of the remoter planets are rather more

widely wrong than was suspected. The measurements made at Washington during the last two or three years reduce the diameters of both Uranus and Neptune by several thousand miles, and actually invert their relative size, making Neptune the smaller of the two. The diameter of Jupiter, on the other hand, is increased about one thousand, five hundred miles. These Washington measurements are partly corroborated by others, made abroad.

Probably it would be too tedious to discuss all the problems now under investigation relative to each individual planet, so attention is given to only a few of the most interesting and important.

One is the study of the rotation of Mercury and Venus. It has been announced positively, by Schiaparelli, and it is now generally accepted, that Mercury keeps, in the long run, the same side always turned toward the sun, as the moon does toward the earth; and somewhat less positively that Venus behaves in the same manner. But it is very difficult to obtain satisfactory confirmation of the fact, because of

the vague, indefinite character of the only markings which most observers are able to detect on their surfaces. In the case of Mercury a certain amount of confirmation has been obtained, and there is no contradictory evidence worth mentioning; but in the case of Venus it is not so, and observers still debate the matter warmly. Perhaps the spectroscope will finally settle the matter, though thus far it gives only an indecisive reply. The importance of the problem lies in its weighty bearing on the theory of planetary evolution by tidal action.

For the past thirty years, the attention of observers has been specially concentrated upon Mars. Some, like Flammarion and Lowell, see in it a world somewhat resembling our own, with seasons, snows, watercourses, and vegetation, probably peopled with intelligent inhabitants who can plan and execute engineering works on a vastly greater than any human scale. Others, on the contrary, regard these views as, in the main, unfounded and visionary, believing that, on a planet so small and distant from the sun, a deficient atmosphere and the diminished energy of solar rays must preclude anything like terrestrial conditions. Naturally, therefore, astronomers are anxious to obtain data to decide the points in question, and that of temperature is crucial. At present our instruments have hardly sufficient deli-

cacy to determine it; but, if their improvement goes on as rapidly as in the past decade, we may hope to reach it soon.

Meanwhile, careful study of the surface changes which are unquestionably taking place, some of them clearly periodic and others continuously progressive, will reach far toward true conclusions, especially if simultaneous observations at different stations, with different telescopes and eyes, enable us to discriminate between real phenomena and illusions of individual observers.



Fig. 3.—The dark lines shown in the solar spectrum

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It is unfortunate that photography cannot be appealed to, but as yet no success has been attained in this way; but what the future may have in store cannot now be foretold.

Regarding the asteroids, the family of small planets between Mars and Jupiter, little need be said. Eros, discovered in 1898, is interesting because of its close approaches to the earth, and its consequent availability for determining the dimensions of the solar system. It is also interesting in another way,—for a peculiar rapid variation of brightness when in certain positions, making it possible to determine by photometric observa-tions the length of its day, (about five and a half hours,) and, roughly, the position of its axis. This is the first application of photometry to such a problem. Similar less conspicuous variations are also noticed in certain other asteroids, now under careful observation.

The search for new asteroids is still assiduously maintained by Wolf, of Heidelberg, who, in 1891, first introduced the method of detecting them by their "trails" upon photographic plates, upon which the images of the fixed stars are round dots, while those of planets, which move during the exposure, are elongated into streaks. In some cases as many as seven such planetary trails have been formed on a single plate, -not all of them

new, however.

Another flock of pygmy planets may possibly exist between Mercury and the sun. It is one of the hopes and aims of eclipse observers to detect some such little bodies upon their photographs.

The giant Jupiter is always an interesting object to astronomers, both professional and amateur. The rapid changes which continually pre-

sent themselves in its swift rotation are carefully watched and recorded, though in many respects their real nature and explanation still remain obscure, and the subject of brisk debate. The "great red spot," so conspicuous twenty years ago and still persisting as a faint ghost of itself, is particularly puzzling. Mr. Denning, indeed, maintains that it is a permanent feature of the planet, though greatly changing its appearance from time to time, and perhaps a mere atmospheric indication of some peculiar underlying region of the planet's real surface. He identifies it with many somewhat similar appearances which have been noted, from time to time, almost ever since the telescope first came into use; but the identity is at least doubtful.

Much labor has of late been expended by Barnard at the Lick Observatory, and See at Washington, in careful measurements of the dimensions of this and other planets. Their results, while not entirely accordant, show, by comparison with those hitherto generally accepted, that the real values are still considerably uncertain,—that, instead of knowing the diameters within a hundred miles or so, the error may reach thousands in some cases. This is due partly, no doubt, to imperfections of the telescopic image and unsteadiness of the air, but mainly to "irradiation," a phenomenon of the retina which causes us to see bright objects too large, by an amount which varies rather capriciously with different observers under different circumstances.

It is worth noting that photographs of Jupiter obtained at the Lick Observatory some years ago have proved good enough to be employed as [Concluded on pages 56 to 58]

ORION DOMBEY, GROCER

The Story of a Shiftless Man

J. GEORGE FREDERICK

well-dressed drummer nodded with some indifference to the proprietor of a Meadville general store, as he entered the dreary shop. Evidently the proprietor

did n't count for much in the mercantile memoranda of the drummer, who had made regular trips there every month, and the last time he had received an order was six months back, and the bill was still unpaid.

"How's business?" he asked, jocosely, though he knew the answer better than the proprietor. There was nothing hidden from his shrewd eye, and the store certainly made no pretense of hiding

anything from him.
"Oh, well," drawled Orion Dombey, the owner, with lazy apology, "I'm makin' a livin', but the business ain't pickin' up any. Don't want nothin'

The drummer leaned against a sugar barrel and looked reflectively at the figure behind the counter. It was that of a pudgy man, wearing a pair of greasy spectacles, and also a mustache that curled loosely into his mouth. A white shirt bosom showed a succession of tobacco stains, and a half circle of rubbed dirt at his waist, where his disproportionate girth came into contact with his stock.

"I sold a nice little bill to Jim this morning," said the drummer, suggestively. Jim's clean store windows, in a new brick building up the street, were but dimly visible through Dombey's soiled window panes.

Dombey answered, with a deprecatory gesture: "Jim's got more money than I have, and he's got more business.

The drummer laughed. "You're right," he replied, amiably. "Jim has got a little more busi-I wonder where he got it. You started ten years before he did.'

Dombey put on an air of vindicative hurt. "He stole it from me!" he said, with vehemence. "He could never have kept open if he had n't stole my customers." The memory of his hurt brought a flush to Dombey's cheek.

"How did he rob you of them?" asked the drummer, with quizzical sympathy. "Did you have a lien on them?"

The grocer waxed wroth. "Every mean trick he ever learnt," he said, with accusing intonation, "he played on me to get my customers. Nothin' was too small fer him, and is n't to this day. He has n't got no more fairness and squareness than 'possum, he ain't. He lies and slanders an' throws dirt at me whenever he can. He's the meanest man-

"What was one of his tricks?" asked the drummer, interestedly.

"What do you think of a man that goes an' writes a letter, an' has the gall to print it, an' send it right in front of my nose to my own customers, —people that's been tradin' here ever since I've been in business, —sayin' that he'd give'em better bargains than they could get anywhere else? Ain't that tryin' to steal my trade,—my own good, hon-est trade? An' then, tellin' the people that come to the store that there was n't no use payin' stiff an' high prices when he could sell cheaper'n anybody in town,—anybody in town, mind you, an' was the only store till he kem. An' then, watchin' my price on every thing,—even brooms,—an' sellin' 'em at a cent lower,—just to git my customers to go over. Ain't that takin' the bread out of a man's mouth, an' robbin' him? Say, ain't it?" Dombey's face was florid, and his breath came like a wind pump. He took off his glasses and wiped them with trembling agitation.

The drummer looked at him with half pity and sympathy and half amusement. "Dombey's an honest man to the core," he reflected, "and I'm no more afraid for the sixty he owes us than if he were worth the whole town. He's a good old soul, but he's rotting off like a pine stump. He ought to be woke up, somehow. By George, talk about shiftlessness!" The drummer took a casual look around the store, his face showing his repug-"I should think the fellow's pride, if nothing else, would make him keep things in order. He is a touchy fellow, I remember by experience. That might be his salvation.

"Dombey," he said to the grocer, with some asperity, "Jim's figuring on putting you out of the business.

Dombey's eyes flashed with a snap that made the drummer feel hopeful. "That's what he the drummer feel hopeful. wants," cried the grocer, in a high, excited treble, the 'd glory in it. That's just what he's waiting If he'd know any way to do it, he would sheriff me, or get somebody to do it to morrow. Nothin's too mean for him. He'll skin a cat for a penny,—yes, sir, he will. But he ain't goin' to it; no, sir, he ain't. D' ye hear? He ain't! If I don't have no customer left, an' if I don't make enough to keep my dog, Williams, he ain't goin' to drive me out. Never! NO, SIR!"

Dombey was gesticulating with both hands, and his pudgy face was red as blood. His spectacles had fallen off in the violence of his frenzy, and he was trembling with pent-up passion.

Williams laughed uproariously. got the right stuff, all right, Dombey," he said, heartily.

Dombey sought for his glasses in the rubbish under the counter and made no reply.

"Let's see, Dombey," said the drummer; "you used to have a nice trade, did n't you?"

"I had everybody in town, an was makin' money," replied Dombey, proudly, "before Jim I had three men workin, and we started up. were busy the hul day."

"Where's Rube, by the way?" asked the

drummer.

"He left," replied Dombey, simply. "He's got extravagant notions. But I don't need him,

anyway."

"No," replied Williams, "I don't believe you do. You can handle all the business yourself

"Putty near," replied Dombey, cheerfully.
"I liked Rube," said the drummer; "he's got ambition, and he is n't afraid to work."

"He is that," conceded Dombey, indifferently. The drummer reflected. He was deciding on a

hit or miss plot for the grocer's benefit.
"Dombey," he said, pointedly, and with cool deliberation, "do you know that you're the slowest, most shiftless business man I've got on my list?"

Dombey winked in bewilderment, and spluttered

an incoherent and unintelligible reply.

Do you know, Dombey, continued the drummer, coolly regarding him, and without varying his tone, "that you've got the dirtiest, fiercest, darkest, ugliest, stalest dirt-hole of a store that I've seen in many a long day?'

Dombey was just recovering his breath in gasps.

Anger was rising heavily to his lips.

"And do you know, Dombey," persisted the drummer, imperturbably, "that you re lazy and stubborn, and that somebody ought to throw you out of your own door, to wake you up?

Dombey was assured that his slanderer was in earnest, and he began to blow through his nostrils as if they were a pair of bellows.

"No Indians or darkeys, ' said Williams, with a sarcastic sweep of his arm over the store, "have such a miserable junk shop for a store as this, as a rule. No self-respecting person would buy anything of you. It's a wonder you take in two cents a

day—''
"You—you,—'' began Dombey, blinking weakly with mighty wrath. Then he choked.
"Don't say it, Dombey," remarked the drum-

mer, kindly.

"I'll poke your face in!" roared the grocer,

exploding at length, and excitedly shaking his fist.
"You ought to poke the dirt out of your store corners instead," replied the drummer, with biting sarcasm, walking leisurely to a corner of the mis-

If you wish to win success in life, make perseverance your bosom friend, experience your wise counselor, caution your elder brother, and hope your guarding genius.—Addison. Digitized by Google

erably appointed store, and kicking at a raisin box,

dust-laden and uninviting.

"I sold you this box six months ago, did n't I? or was it a year?" he remarked, with an exasperating smile.

"That's none of your business!" shouted Dombey, from behind the counter, in a high key of ex-

citement and anger.

"Let's see, I do n't think you've got anything canned from me in over a year and a half, have you? Say, Dombey, how often do you sell a can of tomatoes?—once a month?"
"Get out of this store!" shouted Dombey, wildly, losing utter control of his temper.

"I'm going pretty soon, Dombey," replied the drummer, amiably, inspecting the little counter desk in the rear of the store, strewn in high disorder with old bills, invoices, cigar ashes and ends, old pencils and stubs, and cheap, thumbed ac-

"I'll tell you," he said, impressively, "you're a great man, Dombey. Marshall Field, John Wan-amaker,—they don't touch you, not nearly. "And where did you learn window display,

Dombey?"-gazing scornfully at the windows, littered with dead flies, cigar boxes, dusty dry goods, tumbled canned goods, and fly paper. The window-

panes were thick with dust and grease. Williams's tone was becoming unbearably taunting, and Dombey, flashing with rage, was standing at the end of the counter.

"If I could have a guess, Dombey," continued the drummer, "I'd say there were about five hundred generations of flies interred in your window, and your goods are about as ancient.

"And when," he continued, with a pretense of disgust, and ignoring the grocer's threatening attitude, "did this floor get water? I believe I see my footprint that I made six months ago over there. Do my eyes deceive me, or am I right?"

"If you do n't get out in two minutes, yelled Dombey, bursting forth again, "I'll—I'll throw you out into the street! "In a minute.

Dombey, in a minute," returned the drummer, gazing toward the dry-goods counter, littered promiscuously and confusedly with notions, remnants, and miscellany, for further criticism. "Are you conducting a bargain rummage sale?" he asked, seriously.

Dombey made an aggressive move toward him. said the drummer, as he made his way leisurely toward the door, "Jim's got a great place, clean as a pin, neat as a ladies' parlor, Dombey. Everything is where he can lay his hands on it in a minute,—light, clean windows, and choice stock, -choice stock, Dombey. It goes out, too; always something doing at Jim's place. He takes in more money in a day than you do in a month. heard he's going to build out back,--too small to hold the business. Jim don't look like a dirty rat like you, __''

Dombey lunged forward toward him, with blind anger, and Williams went out of the door with

careful haste, lingering on the pavement.
"Say, Dombey," he called back, "I'll give you about three months. Jim'll have you against the wall, dead, by that time. There won't be anything of you left but hair. Good-by!"

The door banged, and the drummer chuckled to ine door banged, and the drummer chuckied to himself. "That was a sort of bold dash," he soliloquized, "but I do n't know human nature any if that won't stir him up. He's got pride, and my money says he won't go to the wall. It's just the blind rut the man's got into. He never goes out blind rut the man's got into. He never goes out of his own town, and doesn't see anything new, and have town, and doesn't see anything new, and he's built up such a virulent hatred for his

rival that he can't see the superiority of his ideas. The only way to poke a man like that into action is to make him hot under the collar by ridicule and give him a motive to do better.'

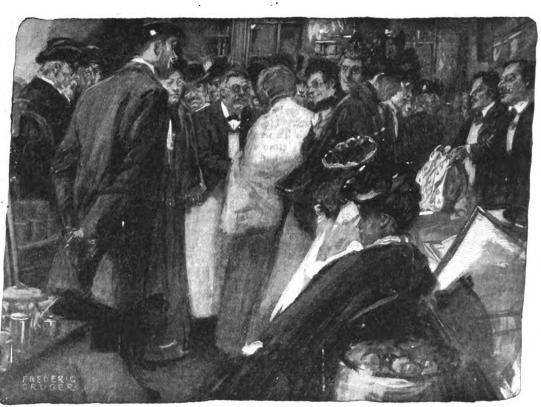
When the drummer went to the desk of the little country hotel, the next morning, prepared to leave, the 'squire or notary public of the village was talking to a group.

"Donrbey's on his last legs, I guess," he said, dolefully; "he placed a mortgage on his house this morning."

A broad smile spread over the face of the drummer, and, as he went out to catch his train cityward, he merely said, half aloud, "I did n't think Dombey was worth more than his barrels;" then he buried himself in the morning's news.

If any one who came into Dombey's store that afternoon had noticed it, they would have seen that he was much preoccupied. He did put molasses in a petroleum can for Mrs. Allen.

His mental mechanism had received a rude jar, which worked deftly on an obstinate cog. Every phrase the drummer had uttered, vilely scorning both himself and his store, lingered within Dombey, and rehearsed itself so often in his ears that his cheeks were kept aglow with the thought of it all the time. For a long time the only sensation



"Perhaps there was not quite so much buying as there was in the way of inspection"

that he experienced was that of intense, passionate anger toward the drummer. A hundred times he reviled his insulting insolence to vent his wounded pride, but each new epithet and burning denunciation failed in turn to justify the matter.

He looked at the dirty windows, and the drummer's stinging rebuke came provokingly to him. He looked at the floor, seeing the dirt for the first time, and the drummer's sarcastic jest stung him until he ground his teeth. He looked at his desk, with a first realization of its disorderliness, and the drummer's reviling comparison goaded him the more. He looked at the dusty raisins, the disordered dry goods, the musty shelves, and the unswept corners, and again heard in his ears, with maddening emphasis, the drummer's critical scorn.

Slowly, unwillingly, he was forced to see at least a vestige of truth in the drummer's comment. By degrees he admitted, first, that his place might look a little better; later, that it really was dirty; and, still later, that he ought to fix it up at once,ostensibly to show any impertinent drummer who might come that way that he could keep a clean store; but, fundamentally, because a small, unrecognized voice within him told him that he was a dirty, shiftless man.

When Mrs. Perkins came in to buy a few articles, he could n't look her in the face. In his overwrought imagination he fancied that she, too, cast scornful glances at the shelves, the windows, and the floor. But Mrs. Perkins was as shiftless as himself, and she was as wholly innocent of a thought of the order and cleanliness of the store surround-

ings as she was of those of her home. He even thought Hank Robinson, the loafer and braggart of the village, looked critically at his stock when he came slouching in for a paper of tobacco; whereas, to a man of Hank's taste, the dirt and disorder only made the store more homelike. He could expectorate on Dombey's floor; at Jim's he was not allowed to. Dombey's self-consciousness became intolerable. Looking about the store he saw a score of things that he was thankful the drummer had overlooked, but which, he felt, with a new sense of shame, he might quite readily have criticised. He was thankful the drummer had not looked into the cellar, where there was an unsightly jumble of boxes, barrels, and rubbish. He experienced a sense of relief that the drummer could not have seen behind the counter, where were strewn in endless confusion odds and ends of vegetables and other stock.

He closed his store early that night and walked up the street, past Jim's. He curled his lip with vindictive scorn, but he could not refute or deny the neatness, the air of prosperity, order, and bustle inside. For the first time he felt a pang of jealousy. He could beat Jim all around, he thought, if he had the money. But he could see no possibility of a good fairy burst of fortune, and

it piqued him tre-mendously. Why could n't he have a store like that?
"Why?" A dogged

determination began to lodge in him.

He walked homeward and felt relief again, as he entered his dooryard, that the drummer had not seen the broken gate, the uneven path, and the tumbledown outbuildings.

"While you're here early for once," said Mrs. Dombey, fretfully, as he entered the kitchen door, "you can fix them chicken coops. I've told you about 'em enough now.''

"Got no time," growled Dombey, crossly, settling in a corner. It was useless to remonstrate with Dombey, when he was ensconced in a chair, Mrs. Dom-bey well knew, and she did not demur. He had been seated for hardly five minutes when he rose

with unprecedented haste and smote the table a resounding crash.
"Mercy me!"

cried Mrs. Dombey, with a scream, "what are you going to do?"

"I'm going to mortgage the house," replied

Dombey, in a tone of final determination.
"Oh, Orion Dombey!" cried his wife, burst-

ing into tears, "we'll be in the poorhouse soon!"

"Keep still!" snarled Dombey, with a blaze of hurt in his eyes, "I know what I'm doin'." His wife's emotion solidly fixed his purpose. He had an inkling, received from self-introspection that day, and he saw what his wife thought. He resolved to exert his every tendon and faculty to succeed. His pride was widely awake to his shortcomings.

He wrote an order that night to a rival grocery concern of the bold drummer's for five hundred dollars' worth of stock. He was almost appalled to realize how very little he could buy for that

The next morning, when the two men he had hired reported for work, he was a different man. He was no longer inanely content to loungingly gaze through dirty windows upon the village street, with to-day as yesterday, and to-morrow, and next month. He had a purpose. He was engaged in a contest which called his faculties into battle array.

He sprang about nimbly, aiding untiringly in the complete regeneration of the store, until his avoirdupois, protesting against so much unusual activity, forced him to rest. He grew enthusiastic as the cleaning and improving progressed, and his

imagination was brought into play. He pictured to his mind's eye idea after idea, and proceeded to carry them out with enthusiasm, measuring up to his highest conception and observation of cleanliness and order, more sharply defined by the criticism he had borne. From a requirement of pride to make it uncriticisable, his work begat in him an enthusiasm for its own sake, and, by the time he had finished, and made his store light, cheerful, and clean, and placed his new stock, he was so proud of it that he was anxious that every one in the village should see it.

A new suit, a clean apron, and a boy to help him in Rube's place, added so much to his satisfaction and comfort and enthusiasm that he walked about the store a dozen times an hour, looking about with deep gratification, and whistling.

Some one—if he had suspected the drummer, he would, undoubtedly, have tossed it contemptuously aside, -sent him a grocer's journal, full of up-to-date suggestions and pictures. It opened a new world to him.

His feeling toward Jim had al-ready evolved into a lusty desire for combat, and his head was full of plans to win back lost trade.

From an idea he had read about, he decided to

invite all Meadville to a big bargain opening.

The village printer was given a job, and the villagers and populace of the surrounding country read with curiosity and interest of sugar and molasses at tremendously reduced prices for the day; of fresh goods and a new store, and a long list of special bargains in the things that were needed and bought by the folks thereabout.

From the hour of opening until the last hour of business, Dombey's store was crowded. Perhaps there was not quite so much of buying as there was in the way of inspection and social gathering out of curiosity and interest. Then there was the additional attraction of a cheap celluloid matchsafe as a souvenir, which Dombey proudly handed to

each customer with his compliments.
"Somepin must 'a' struck Dombey clean atween the ribs," remarked Hank Robinson, with a slouchful eye of wonder, as he retreated from the store with a little disgust after he had been requested

not to expectorate on the floor.

The old customers—those who, a few days before, had bought in a dirty, slipshod, dark place, -hardly knew whether to be pleased or dubious about the change, so great was their surprise. Dombey bowed and greeted, and chattered and bustled with an enthusiasm which gave no sign whatever of his old lackadaisical ennui. Even the gratification at an uncriticisable store did n't equal the pleasure of having his store crowded, the cash drawer rattling merrily, and his employees bustling hither and thither in a perspiring hurry due to the stress of trade. It was an exhilaration with which Dombey could have intoxicated himself. That night, in bed, after he had been astounded

at the trade that had gone over his counters, he woke a dozen times, instead of, as usual, snoring like a lout, and could scarcely wait until morning, so full was his head of ideas, of the delirium of success, of the nervousness of mental motion, the sprouting of plans in his awakened mind for getting trade.

The next day was Sunday, and, while walking up the street with his wife to the little white church on the top of the hill near by, he met Jim in his prosperous-looking best clothes.

"You're strikin'out, ain't you?" Jim observed, facetiously. Jim was not a generous man, and he

had contempt for Dombey.
"Kinder," coldly answered Dombey. Jim had passed, a curling sneer adorned Dombey's

lips, and his teeth set harshly.

"That scoundrel," he remarked, uncharitably, to his wife; "he'll get his medicine yet!"

"Orion Dombey!" remonstrated his wife, with pious severity; "what are you sayin' on the Lord's Day?"



"Do you know that you're the slowest, most shiftless grocer on my list?"

The struggle came when the novelty of Dombey's store wore off, and customers were no longer attracted by curiosity. He had to confess, after a few weeks, that, with his new stock, his added expenses and help, his store was not on a paying basis, even though he had gained tremendously over the old order of things. He had several sleepless nights, and had almost decided to proceed more cautiously by discharging one of his young men, when the thought of the sneers that he would hear, from his enemies and from Jim, made him compress his lips and decide that he would go forward or "bust." He would cut off his right hand before he would show a white feather, and he decided that he would go to the city for new ideas.

When Dombey came home from the city he was filled like a schoolboy with delight. He talked, dreamed, and thought grocery trading and grocery

methods. For a whole day in the city he had met grocers, introduced to him by the grocery-supply concern, and by visiting upto-date stores he had seen new and smart ideas in successful operation

The village printer was at work early the next day on some post-When put up they informed the public that Dombey would sell coffee at fifteen cents a pound for two days, to introduce a fine line of general merchandise just purchased.

The news spread, -over backvard fences, at the post office. and by various other means; and, at the end of the second day, Dombey had to send for more coffee.

"It cost money," mused Dombey, when he had figured up his loss, and bravely faced inward misgivings with the confidence of safe investment he had grasped in the city; but there are the Ed-

wardses and the Jameses,—they came to-day, an' their trade I orter hold; and there was a hul lot of Jim's customers; I orter git some o' them.'

As Dombey knew everybody in the village, it was not hard for him to go to see everybody who went to his store, as well as many who did n't, and endeavor to convince them that they ought to trade with him. Many of Jim's customers refused to make a change, but the percentage that did encouraged Dombey to keep up the practice. The rest he persistently attacked in various ways and finally won a large number. He kept up his posters for

a long time. But when the bills for his goods came due, and the extra costs about the store to keep up the freshness and the cleanness and the attractive displays counted up mysteriously into big bills, Dombey was sorely tried. He was making very little money. In a mood of economy he sent off one of his men, and stopped his poster advertising. The little village, after the manner of little villages, was quick to notice, and quick to suspect. When Dombey saw Jim again, the rival storekeeper said, insinuatingly, "Kinder gettin' off yer high horse, ain't yer?"

"I'll put you altogether off your'n, Jim Johnson!" roared Dombey in answer with tempes.

Dombey in answer, with tempestuous anger, as his pride rose within him to high tide.

The next morning he re-employed his discharged hand, and set about with enormous determination to win enough trade to make the store pay or "go up" in the attempt. He would make Jim Johnson cry quarter, or his name was n't Orion Dombey.

He started special bargain sales with a new vim, and kept up special interest in his new stock by deft advertising, and by shrewd purchases of job lots in the city,

so that his business grew daily. Of course, every new customer that he got was formerly one of Jim's. Dombey's patience in inducing, convincing, or attracting, one by one, Jim's customers, was unlimited. He awarded pieces of crockery to the families that made the most purchases in a month, allowing them to count new trade they brought there themselves; he tried premium inducements, and every new scheme he heard of or could invent himself, to induce Jim's customers to desert. Jim was not the sort of man to relish or thrive in adverse conditions, and, after trying a few weak efforts to rival Dombey in his relentless war, he became disgusted and moved to an adjoining town, where the struggle was easier.

The satisfaction that Dombey felt at this victory for himself was greater than that of a politician who, after years of manipulation, at last secures a coveted plum. He had not expected to win so soon.

One evening Dombey sat in his easy chair, and got into a rem-iniscent mood. "It is only about nine months ago," he mused, "that I cleaned out the store and began to go ahead.' Then his thoughts ran, unbidden, to the old store, and a clear picture of it came before his eyes. He stopped smoking for a minute. "Gallagher!" he exclaimed, with conviction, "the old store was a dirty j'int!" The words smote his memory unpleasantly, and he began to think of the reasons that made him change. The drummer came into his vis-He had no vestige of ion. enmity toward him, evidently. "That feller ought to have some o' my trade," he said, as if the thought had just occurred to him. That night he wrote to the drum-

mer.
"Where's Jim?" asked the latter, when Dombey had greeted him effusively; "I see his place is closed. What on earth has happened to him?"

"There ain't no room for two stores in this town," replied Dombey; at which remark the corner of the drummer's mouth twitched slyly with satisfaction.

"You finally woke up?"

"Well, yes. Kinder thought I was goin' t' sleep till,—till you came along."

Dombey smiled and extended his hand, which

the drummer shook warmly. Then, with the air of a veteran, the latter reached for his order book,

and both men were soon discussing the market.





on the part of his neighbors which attaches to anyone possessing great power, and who, as yet, has hardly indicated just what use he is likely to make of it. What he does with his opportunities concerns all the world, and us most of all, for we, every one, have some influence with him, and, therefore, some responsibility for him. In the series of articles which are to follow, I shall try to make my readers better acquainted with him, and with his prospects in life; and it is well to begin with his estate,—our country,—for the land in which a nation lives has very much to do with its character, its civilization, and its history. Victor Cousin said, "Tell me the geography of a country and I will tell you its future."

The Inhabitants of the North Temperate Zone Are the World-builders

Every nation is what it is by reason of two great causes: first, its ancestry, and, second, its environment. By environment is meant climate, soil, mountain ranges, valleys, river systems, mineral resources, coast line, and distance from the sea, together with influences which have come through

contact with other peoples.

1.—Let us consider, first, the location of the United States. All of the great civilizations of the world have been north of the equator. Civilization first arose in tropical regions, but the course of history shows that the center of power and the star of empire have ever moved northward and westward. Egypt and Assyria were once world-powers; then the scepter passed north and west to Greece and Rome. Then Spain and France and Great Britain, each in turn, rose to preëminence. Still westward the course of empire took its way until to day our continent has become the course of empire took its way, until, to-day, our continent has become the seat of the greatest power in the world. There is no North beyond North America, and beyond our West is the East!

It is not strange that northern peoples should have conquered southern peoples. because climate and the general conditions of life render them

It is not strange that northern peoples should have conquered southern peoples, because climate and the general conditions of life render them more hardy. The heat of the tropics is enervating. Nature there is too indulgent. She gives much food for little labor, and men have small need of shelter and clothing. In northern climates, they must earn their bread by the sweat of the brow, and be well housed and clothed against winter cold. These necessities are whip and spur which compel an active life, and result in a robust development. Where nature is thus kindly severe, men are likely to be more vigorous morally as well as physically. They learn more self-control, and have their appetites and passions better in hand. In the Future, the Beautiful Standard China Landard Resulting

In the Future, the Pacific Coast Will Lead All Other Lands in Population

But too much of a good thing is a bad thing. Too great cold paralyzes instead of stimulating, and, in the frigid zone, men are stunted both in body and in mind. Thus it appears that the north temperate zone is most favorable to the development of high civilization and of national greatness. This is the zone of power, and this is our fit our zone. "Our country's welfare is our first concern."

If South America were the exact counterpart of North America, in area, in coast line, in mountain ranges, in valleys and river systems, in soils and mineral resources, it could not possibly produce on North America. duce as great a people and as high a civilization as North America, because of its location. Three-fourths of the southern continent lies in the tropics. Moreover, it is remote from the world's life,

It seems much farther away than Europe, and more out of the world than even China. About ten out of every eleven of the world's population live north of the equator. It is the northern hemisphere which swarms with north of the equator. It is the northern nemisphere which swarms with the world's millions, hears the roar of its factories, feels the tread of its mighty traffic, and is the stage of all its greatest activities. The United States is in the pathway of the nations; with Europe and Africa on the east, with Asia and Australia on the west, and South America on the south, we are in the midst of the continents,—the most centrally located land on the corth the earth.

Uncle Sam has a better business stand than any of his competitors. By far the greater part of the world's population is to live around the Pacific Ocean. It is to be the Mediterranean—the Midland Sea,—of the future. At present England has a commercial advantage in the Pacific, but the cutting of the Letherian Canal will transfer these districts. but the cutting of the Isthmian Canal will transfer that advantage in the Pacific, United States. If a British ship should sail from Liverpool for Cape Horn, and an American ship should sail from New York for the same point, the latter would have to sail one hundred and 66 will be said from the same point, the latter would have to sail one hundred and 66 will be said from the same point, the latter would have to sail one hundred and 66 will be said from the same point. ter would have to sail one hundred and fifty miles farther than the former to reach the Cape; and that means that every port on the western coast of South America, Mexico, and North America is, by water, nearer to Liverpool than to New York. By sea, San Francisco is, to-day, one hundred and fifty miles farther from New York than from Liverpool.

The Direction of the Mountain Ranges Is an Important Factor in Climate

Suppose that the two ships sail from New York and Liverpool for the Suez Suppose that the two ships sail from New York and Liverpool for the Suez Canal! The latter ship would have an advantage of two thousand miles over the former, which means that all Asiatic and Indian ports are, by the Suez Canal, two thousand miles nearer to Liverpool than to New York. But when the Isthmian Canal shall be cut, New York will have an advantage of about one thousand miles on the average to the ports of North China, from eight hundred to twenty-seven hundred miles to the principal ports of the central and western Pacific, and from twenty-seven hundred to thirty-five hundred miles to the ports of the eastern Pacific. That is, commercially speaking, the Pacific is now a British ocean. By reason, therefore, of the location of the Pacific is now a British ocean. By reason, therefore, of the location of the United States, we shall always have better access to the markets of the world than any other people. Not only does our location give us a great commercial advantage, but it also saves us hundreds of millions of dollars every year by freeing us from the burden of a great standing army such as wellnigh crushes the life out of every great continental power of Europe.

As the London "Spectator" says, ours is "a situation on this planet unparalleled."

2.—Turn now to the configuration of the country. The new

world has a marked advantage over the old in its comparatively small breadth and in the direction of its mountain ranges, which permit the fertilizing influence of the ocean to reach almost every part of the interior. The general direction of the new world and of its mountain ranges is north and south, while that of the old world and its mountain chains is east and west. the result of this difference, the deserts of America are few

small, while a belt of sand and arid waste, some ten thousand miles long, stretches from the Atlantic across Africa, Arabia, Persia, Thibet, and the Tartaries, almost to the north Pacific on the eastern rim of Asia, interrupted here and there by rich valleys which are reclaimed from the desert by such rivers as the Nile, the Euphrates, and the Tigris. The Great Desert of Gobi would fill the entire Mississippi Valley from the Alleghanies to the Rockies. Upward of three hundred thousand square miles of Arabia are an unhabitable waste, while the terrible Sahara is vast enough to cover the whole United States. These deserts, except for occasional oases, are unproductive, they obstruct intercourse, and their heated sands materially affect climate many miles distant.

The United States would undoubtedly have been subjected to all these disadvantages, had the longer diameter of the continent run east and west instead of north and south, or had a mountain range crossed the country east and west just north of the Gulf of Mexico, or if the Gulf of Mexico had not existed. Again, if the Alleghanies were as high as the Rockies, they would have been a barrier to the trade winds blowing from the Atlantic, would have wrung from them their moisture, and thus have created a desert west of the mountains. The trade winds of the Gulf find a mighty wall in the mountain chain of Central America and Mexico, which deflects them up the Mississippi Valley, thus fertilizing the interior of the United States. If this mountain wall had been as low as the Alleghanies, the Mississippi Valley would probably have been a desert waste.

When I was a boy, the maps represented the wide plains between the Missouri River and the Rockies as a desert. Now "The Great American

Desert' produces millions of bushels of wheat and corn, affords range for great herds of cattle, and is dotted over with hundreds of thriving vill ges and cities.
There are some desert areas in
the mountain region of the West, but nothing at all to be com-pared with the great deserts of the old world.

The Extent of the Mississippi Basin

In regard to our mountain ranges, it is worth noting that they are near the court, and thus afford us splend. Water power for our manufacturing cities close to the seaboard, which abounds in bays and inlets favorable to coast trade and foreign commerce. Furthermore, this location of our mountain systems creates the Mississippi Valley, whose vast area, inexhaustible alluvial soil, wonderful rivers, and enterprising people make it, both commer-cially and politically, the most important valley in the world. It contains over one million square miles, nearly all of which is wealth-producing; and no other river basin is so free from the

diseases of low-lying countries.

It is a remarkable fact that, of the five great continents, North America is the only one whose rivers generally flow toward each other. The central regions of Europe, Asia, Africa, and South America are mountainous. Accordingly the rivers, which of course rise in the mountains, flow away from each other toward the sea, rendering intercommunication by navigation impossible. But in the Mississippi Valley large rivers seek each other and meet in the mighty attery which bears their waters to the Gulf. It is not meet in the mighty artery which bears their waters to the Gulf. strange, therefore, that the other continents are, respectively, occupied by many different peoples, separated from one another not only by mountain walls, but also by customs and characteristics, laws and languages, while the United States is inhabited from ocean to ocean by one great people.

It is true that Canada is under another government, but her people are essentially one with our own in language, in blood, in laws, and in civilization; and the day will undoubtedly come when she will ask to be admitted to the sisterhood of states, and we shall then be one people, not only from the Atlantic to the Pacific, but also from the Gulf to the Arctic Ocean. It is estimated that the river system of this great valley of the Mississippi affords thirty-five thousand miles of navigation, while the rivers of all Europe furnish only seventeen thousand. Moreover, these thirty-five thousand miles are all connected, while the seventeen thousand miles of European waterways are composed of widely separated fragments. So great is the flood which this noble river system pours into the Gulf that many a famous river of the old world would not furnish water enough, as General Horace Porter would say, "to gargle one of the mouths of the Mississippi."

The Difference It Would Have Made Had the Mississippi Flowed Northward

The Rhine is less than nine hundred miles long, and the Danube less than two thousand. The length of the longest river in India is two thousand, three hundred miles, and the longest in Asia is three thousand, three hundred and twenty. The Nile is four thousand and sixty-two; it affords, however, only seven hundred and thirty miles of continuous navigation from its mouth. You may take a steamboat from the mouth of the Mississippi and pass up three thousand, nine hundred miles from the Gulf,
—as far as from New York across the Atlantic to the Strait of Gibraltar, across the Mediterranean and the Ægean Sea to Asia Minor, and up the Dardanelles to Constantinople, and then you will have to disembark and walk four hundred miles, if you wish to equal the distance that would have to be traveled to reach the head waters of the river.

What if this "Father of Waters," like the Nile, had flowed north

instead of south, and, like the Red River of the North, had emptied into the Arctic Ocean instead of the Gulf? Commercially speaking, it would have cut off this great river system from the world, would have made the Isthmiar. Canal useless to the Mississippi Valley, and would have spread annual devastation throughout its course, because the floods of spring from the southern portice of the river would have poured down upon the northern

while the latter was still ice-bound. Tilting the basin of the Mississippi only a few hundred feet would have made all this vast difference.

The great latte system of the United States is no less wonderful than the river system of the Mississippi Valley. Our inland seas are said to contain nearly 1 alf of all the fresh water on the globe. More ships pass Detroit than easer Liverpool or London. All nations use the Suez Canal, and yet its ton age in a year is only about half as great as that which passes the Sau! Sainte Marie in eight months.

3.—Let us now briefly consider the climate of our country. Its most

striking char cteristic is the fact that there is so much of it: that is, a given area in the United States affords a much greater range of temperature and a much greater variety of climate than a corresponding area in the old world. A traveler, passing from the Gulf of Mexico up the Atlantic seaboard to the mouth of the St. Lawrence, would experience as great changes in temperature as if he journeyed from the Sahara Desert to the

Arctic Ocean: that is, a north and south journey of two thou-sand miles on this side of the Atlantic would, in its climatic changes, represent, on the other side of the ocean, a north and south journey of some three thou-

sand or four thousand miles. The Foreigners Say, "Go Slow"

The above-mentioned fact affords us the greatest variety of raw materials for our manufactures, and an unequaled variety of agricultural products, - the cereals and the root crops of Europe, the figs, olives, and oranges of Asia Minor and Syria, and the cotton of Egypt. This adds much to our wealth, but it does more than that, for it affects our character as a people. Different employments, with their different and conflicting interests, led to different habits of life and different ways of think-ing; and a conflict of ideas is one of the necessary conditions of progress. Such sudden and extreme changes of temperature as are common to the greater part of our country are responsible for a good deal of bad temper, but they

MONTANA DAROTA COLORADO

IF EUROPE WERE SPREAD OVER THE UNITED STATES If EUROPE WERE SPREAD OVER THE UNITED STATES

If the several countries of Europe were taken apart and placed in the United States, the amount of land that they would cover would hardly be noticed. Sweden could be placed in California, easily; France would cover only a small part of Montana and Wyoming; Germany would only fill what is now an unexplored part of Texas; Italy would hardly crowd out the inhabitants of Illinois and Wisconsin; the British Isles would make but small counties for a few New England states. Austria would cover only two of our southern states, and Norway, if laid on Colorado, Kansas and Indian Territory, would not occupy the space of an ordinary western cattle ranch.

multiply our wants and quicken our activities. Our stimulating climate is one of the principal causes of American energy and enterprise, at which Europeans and Asiatics wonder.

A friend of mine, who had just landed in Constantinople, was walking along the wharf, and heard a native exclaim, "Ya-wash/" A moment later, he passed a group of Turks, and they, too, exclaimed, "Ya-wash, Ya-wash/" These words were repeated so often and with such emphasis, as he walked up the street, that his curiosity was aroused, and he asked his guide their meaning. "They are telling you to 'go slow,'" was the reply.

On the other hand, a Slovak told me that the very first words of which

his people learned the meaning in this country—and they probably heard them when going down a gang plank,—were, "Hurry up!"

The two expressions mark an important difference between Americans and a majority of mankind,—a difference which accounts, in large measure, for our wonderful progress.

Exceptional Energy Is, in a Large Measure, Due to an Exceptional Climate

Our European friends say that we are "dollar-chasers," and it is true enough that we drive business as do no other people, but it is not because we love money better than others. We Americans are the most open-handed men in the world, and spend less time haggling over trifles than others. We are eager in business precisely as we are eager in play, in study, and in philanthropy. Whatsoever our hands find to do, we do with our might. Our exceptional energy is chiefly due to our exceptional climate.

Our restless activity irritates a European somewhat, and an Asiatic much more. Perhaps this is the reason why they represent us as thin and worn, using up our vital energy, and living out only half our days. But worn, using up our vital energy, and living out only half our days. what are the facts?

During our Civil War, the most exact measurements were made of thousands of soldiers in the Union army. Many of them were of American stock, and many were immigrants from Great Britain, Ireland, and Germany. These measurements revealed the fact that the average European was sixty-six and seven-tenths inches in height, and the average American was sixty-seven and eight-tenths; that the average European weighed one hundred and thirty-eight and six-tenths pounds, while the average American

"Strength of character consists of two things,—power of will and power of self-restraint. It requires two things, therefore, for its existence,—strong feelings and strong-command over them"

weighed one hundred and forty-one and three-tenths; that the chest measurement of the average European was thirty-seven and two-tenths inches, and that of the average American was thirty-seven. Thus, while the chest measurement was a trifle in favor of the European, the American outweighed him by nearly three pounds. It may also be demonstrated that the American is a little longer-lived than the European. All of this goes to show that the American pace is not "the pace that kills," but the pace which arrives; and we may infer that the American climate does not make us live faster, but live more.

Reference has already been made to the fact that the temperate zone produces a higher civilization than the torrid. This fact is due to the difference in climate. Customs as well as costumes are largely determined by temperature. Where it is so warm that men may clothe themselves chiefly or altogether with the atmosphere, like-

"The poor benighted Hindoo, For pants he makes his skin do,"

the climate relieves men of one of the chief necessities of civilized life and prevents the development of a hundred industries. It is conscious want which spurs man out of the laziness of savagery, so that in torrid regions he

lacks one of the great motives to rise above primitive conditions.

Then, too, it makes a great difference whether the life of a people is led chiefly outdoors or largely indoors. If the climate is such that men must have protection from the weather, the home becomes an institution, family ties are much stronger, and woman probably occupies a much higher

position, all of which exerts a profound influence on civilization.

Thus it would seem that the climate as well as the configuration and location of America is singularly favorable to the development of a great people and a high civilization.

-Let us turn now, in conclusion, to the size of our country. noblest civilizations of the past grew up in lands which were very limited, compared with our own, but that was before the steam engine had canceled nine-tenths of space and the telegraph had annihilated the remainder.

The greatest powers of the future will have great numbers and occupy great

at One American State Would Cover, if Laid on Europe

Modern methods of travel have robbed us of any fair appreciation of the magnificent distances of our domain. The parlor car is not unlike the magic tapestry of Prince Houssain in the "Arabian Nights," which transported him in an instant to whatever place he desired without being stopped by any obstacle. In a luxurious chair or a comfortable bed we are whisked through mountains, under rivers, and over chasms, and awake in the morn-

ing half a thousand miles from where we went to sleep the night before.

I have heard of a man who, when gold was discovered on the Pacific Coast, drove an ox team all the way from Maine to California. That man, you will say, appreciated the bigness of his country. Yes, he knew the meaning of three thousand miles, but the United States has grown since then. I do not refer to our island possessions, recently acquired, but to Alaska. The man from Maine would now have to drive his oxen three thousand miles further if he wanted to reach the extreme limit of our western boundary, for the island of Attu, off the coast of Alaska, is farther west of San Francisco than San Francisco is west of the eastern boundary line of Maine. Uncle Sam's possessions cover more area than we imagine.

We are told that one may walk through seven German states in seven

Connecticut is one of the smallest of our states, though it is large enough to have produced many great men and women; and it is large enough to contain thirteen of the smaller German states. Colorado is twenty times as large as Connecticut, and Montana is larger than Colorado by forty-two thousand square miles. Let us make Montana the Mecca of all lands, and gather into it the one billion, five hundred million of mankind; and, when the last member of the entire race has been corralled within the limits of this one state, there will be but fifteen souls to each acre; yet Montana is not so large as California by twelve thousand square miles. Palestine, Greece, and Italy, the homes of the most influential civilizations of the past, might all be laid down in California with room to spare; and Texas is larger than California by one hundred and seven thousand square miles. If this daughter of Uncle Sam should visit Europe, it would take half a dozen different kingdoms and empires there to entertain her over night. If she pillowed her head on the mountains of Norway, and rested one hand on London, the other on Warsaw, in Russia, she would stretch herself down across Denmark, across Germany, across Switzerland and Austria, and across northern Italy. But she would have to be careful not to straighten herself out to her full length, or she would wet her feet in the Mediterranean;—and Alaska is more than twice as large as Texas!

The Natural Advantages of America Will Be Everlasting

If Germany and France should both visit Uncle Sam at the same time, it would not embarrass him in the least. He could put them both to bed in Alaska, and without the slightest danger of their quarreling, for he could tuck Great Britain and Ireland and a few other European countries in

between to keep the peace! Alaska is only one corner of Uncle Sam's estate.

While our country is vast, the phenomena of nature here are not overwhelming as in Asia. There mountains are so tremendous, and deserts so wide, and earthquakes and drought and famines so terrible that a sense of helplessness takes possession of men; they are more or less paralyzed. They are cowed by nature, and become fatalists. In Europe, where everything is on a much smaller scale, men dared to undertake the conquest of nature. Here we have largeness of opportunity and a people whose energy is overtaxed by no table and inhere approach is according to the conduction.

is overtaxed by no toils, and whose courage is equal to all difficulties.

It is worth while to point out that the advantages which have been discussed will not be temporary. Westward migrations, and especially the discovery and settlement of America shifted the center of population and of civilization, and diverted the stream of commerce again and again, thus neutralizing the natural advantages of certain favored countries. But, with the settlement of this continent, the westward movement of ages comes to an end; there are no more new worlds. The natural advantages of America will doubtless be as permanent as her everlasting hills, and will continue to bless us while her rivers seek the sea. This is indeed what Professor Bryce calls the (11 and of the Figure). calls the "Land of the Future."

But it is well to remind ourselves that the possession of such a country is no ground for boasting. We did not locate it, neither did we fashion its mountains or valleys. We did not carve out its river valleys nor its coast line, neither did we determine its climate. All this has been done for us, and it has opened before us the noblest opportunity of all the ages. America is a trust for the world's future. God has made our country vast, but it is for us, her sons and daughters, to make her great.

[Dr. Strong's second article, "Scientific Farming, or Mixing Brains with the Soil," will appear in the February Success]

Dr. Josiah Strong's Self-Promotion from a Newsboy to an Author ROBERT GRAY

ROBERT GRAN

PERHAPS no other writer in the United States is so thoroughly adapted to tell the story of the growth, progress, and future of this country as is Dr. Josiah Strong. In blending facts with romance, he has won a place in literature that is held by no other writer. His convincing, kindly logic; his facts, collated and marshaled with rare skill; his orderly and comprehensive details, all form a fascinating story that is as instructive as it is invaluable. In "Uncle Sam's Talks on Our Country," Dr. Strong will present to the readers of SUCCESS a series of articles which will show the position that the United States holds in the world. In short, it will be a complete story of romance and progress.

Dr. Strong is a self-made man. When a child, he lived with his parents at Hudson, Ohio, a little village of the Western Reserve,—that section of northern Ohio originally reserved by the State of Connecticut. In education, high moral standards, and refinement of its people, this, more than any other portion of the West, is like New England. Hudson was then the seat of Western Reserve College, which is now situated at Cleveland, Ohio, and is known as Adelbert College and Western Reserve University,—an institution which, though small, has always maintained a high standard of excellence and has prepared for his lifework many a man well known to-day. Such an atmosphere cannot fail to have its influence upon any boy.

As the family was in somewhat straitened circumstances during his childhood, Josiah drove a neighbor's cows to a pasture over a mile away, receiving ten cents a week. He was then only six years old, having been born at Naperville, Illinois, January 10, 1847.

When he was fourteen years old, owing to the failure of his father's health and to an unfortunate investment, nearly all the support of the family of six fell upon him. The older brother was then working his way through college. Josiah decided to become a newsboy, and, as the time was at the beginning of the Civil War, when everyone was anxious fo

slept in a barn with the thermometer at times registering thirty-two degrees below zero. He was, however, laying up a store of vitality which would make possible the continuation of his many studies.

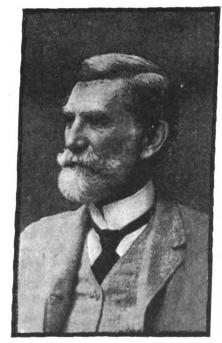
Having completed his preparatory studies at Hudson Academy, he entered college when he was eighteen years old. Having a free scholarship, and acting as sexton of the village church, he managed to meet personal expenses and to aid in the family support. In college, he completed the regular four years' course, and, at his graduation, he was offered the principalship of the academy, which he refused, as he had already determined to study for the ministry. After spending the summer assisting his brother, who was in Missouri surveying for a railroad, he entered, in the fall, Lane Theological Seminary, at Cincinnati, Ohio. There his expenses were met by the gifts of a friend, supplemented by what he was able to earn by working during vacations.

For two years he continued his

cations.

For two years he continued his studies at the seminary, and then, in 1871, went to Cheyenne, Wyoming, as a home missionary, where he began work with a little church of thirteen members who were scattered over a region having a radius of thirty-five miles.

Two years later, he was recalled to his alma maler as chaplain and instructor in natural theology. After three years the college church was united with that of the village, and, as his services were no longer required, he accepted a call to the First Congregational Church of Sandusky, Ohio. While in Sandusky he became profoundly interested in the condition of this country, and, after a pastorate of five years, he accepted the secretaryship of the Ohio Home Missionary Society, in order to avail himself of the special facilities which the office afforded for the study



JOSIAH STRONG

of the home-missionary prob-lem in all its aspects. During his secretaryship of three years, he added much to the material

his secretaryship of three years, he added much to the material which afterwards appeared in "Our Country."

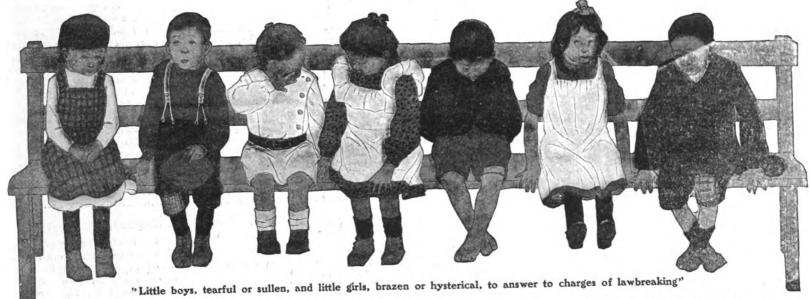
In 1884, he became pastor of the Vine Street Congregational Church, in Cincinnati, Ohio, where he remained for two years. In 1886, "Our Country" was published. With its revised edition, issued in 1891, this book has had a circulation in the English language of about one hundred and seventy the whole book has been republished, a chapter or so at a time, in pamphlet form or in the daily press of the United States, Canada, and Great Britain, and it has been translated into several European languages. This led to his election as general secretary of the Evangelical Alliance for the United States, which office he assumed in November, 1886, in New York City. In 1893, "The New Era," which has had a circulation of about fifty thousand copies, appeared. Early in 1898, "The Twentieth Center of the United States of the United States of the United States which office he assumed in November, 1886, in New York City. In 1893, "The New Era," which has had a circulation of about fifty thousand copies, appeared. Early in 1898, "The Twentieth Center of the Content of the United States of the United States of the United States, which office he assumed in November, 1886, in New York City. In 1893, "The Twentieth Center of the United States of th

"The New Era," which has had a circulation of about fifty thousand copies, appeared. Early in 1898, "The Twentieth Century City" was published. Since then, Dr. Strong has issued: "Religious Movements for Social Betterment," "Expansion," "The Times and Young Men," and "The Next Great Awakening." His books have had an aggregate sale of upward of a quarter of a million copies.

After serving as general secretary of the Evangelical Alliance for nearly twelve years, Dr. Strong, on the first of June, 1898, resigned his position in order to organize the League for Social Service, the object of which is industrial and social betterment. After four years of successful working which demonstrated the practicability, value, and great need of just such a movement, the league has recently been re-organized upon a much broader tasis as the American Institute of Social Service, with headquarters in New York City. Corresponding after a fashion to the Musice Social of Paris, it will have a vastly wider scope and will be much more far-reaching in its influence. Dr. Strong is president of the league. His writings meet squarely the issue of changed conditions in America.

Samuel Hopkins Adams





You do not consider how little the child sees or how swift he is to weave what he has seen into bewildering fiction; and that he cares no more for what you call truth, than you for a gingerbread dragoon. . . If you merely ask him of his past behavior, as to who threw such a stone, or struck such and such a match; or whether he had looked into a parcel or gone by a forbidden path, —why, he can see no moment in the inquiry, and it is ten to on he has already half forgotten and half bemused himself with subsequent imaginings. . . Spare them yet a while O conscientious parent! Let them doze among their playthings yet a little! for who knows what a rough, wayfaring existence lies before them in the future?

ROBERT LOUIS STEVENSON.

ROBERT LOUIS STEVENSON.

IT stands at a busy corner of Third Avenue and Eleventh Street, New York City,—the lowbrowed building to which poor people used to go to beg the city's grudging charity. Now the city carries thither the little violators of its laws, -laws that are made rigidly alike for the young and the old, (and that is a great error,) but which are there wisely and variously, and, it may be whispered, sometimes quite illegally interpreted, -and that is the saving correction. Into the busy courtroom there are carried, every day, as grist to the mills of justice, little boys, tearful or sullen, and little girls, brazen or hysterical, to answer to charges of lawbreaking, from the ordinary mischief of irrepressible youth to the crimes of theft and homicide. The large majority go free, for this is the one court where the saving chance is always the great consideration, and where the old system, which sent a bad little boy into an institution filled with criminal little boys, to the end that he might become a good little boy, is not highly honored as an example of logic. Out of one thousand and ninety-four original cases—all of them children under sixteen years old,-in the first two months of the Children's Court, only one hundred and eighty were committed to institutions.

It chanced that my first visit to the Children's Court was on the day after the recent November election. Naturally there was a full calendar, for the minor ordinances of the city are likely, on a holiday, to be forgotten by merrymaking urchins bent on celebration in various forms not counte-

The duty of the

nanced by law, and without reference to which side wins, being devotees of art for art's sake, whole-souledly. A more sorry-looking representation of the day-after remorse is hardly to be imagined. There was one group in particular: five little Italian boys, whose course from the detention pen to the bar of justice might have been traced—by any chance Sherlock Holmes in the place,—by a trail of tear-drops,-from which he would have legitimately deduced that they were scared, which, indeed, was true. The proceedings in the case were typical. Justice Julius Mayer, who was sitting on the bench, questioned each of the boys separately.

The "Other Feller" Told Him to Do It

"You are accused of tearing down a fence," he said to the first boy, an affrighted urchin of ten. "Do you understand?"

"Yes, sir," stammered the boy.

"What did you do it for?"

No answer was given. Big tears began to trickle down the sharp little nose. "What did you tear down the fence for?" repeated the judge, sternly.

"I_I, _I, _this feller, he told me to," snuffled the prisoner, indicating a larger boy next to him. "No, no. I want to know what you did it for," insisted the judge. "It won't do you any good to shift the blame on someone else."

"We wanted to put it on a fire," sobbed the boy, eaking down. "We had a fire for 'lection." breaking down.

"Why didn't you tell me that at first? Do you go to school?"
"Yes, sir,"—and he gave the number of the school and the grade.

Now, listen to me," said the judge, impress-The whole line of boys leaned forward. "When you helped to tear down that fence, you destroyed somebody's property. The fence cost a good deal of money to build. Perhaps the man that owns it was a poor man. Perhaps it was hard to get the money to build it. Your father is a working man. If somebody should come to your house and break his things, you'd think that was wrong, would n't you?"

There was no reply, but the wide eyes of the youngsters showed that they were considering the matter from a new point of view.

"Now, I am going to discharge you boys this time; but, if you destroy other people's property or fences again, we'll have you back here. Next time you won't get off. That's all."

They Are Kept from Contact with Criminals

A dozen other cases were brought up before the court, all of the same grade of thoughtless mischief, and in each case the frightened boys were given something to think about. Then came a case which, in the eye of the law, was more serious; an instance of stone-throwing which paralleled a trial I had seen several years ago, in the Court of Special Sessions, before New York had realized that the same law does not work for boys in the same way as for men. The prisoner in the old case was a fourteen-year-old youngster, a working lad, who, with no worse motive than mischievousness, had, together with a number of others, thrown stones at a train passing through the outskirts of the city. The presiding justice, before whom they came, had never been a bo had forgotten all

about it, if he had, and acted with an eye solely to the law.

"Under the statutes," he growled at the terrified prisoner, "the charge of which I find you guilty is a felony, and you could be sentenced to twenty years' imprisonment therefor. I shall send you to the House of Refuge for five years."

Under the skillful teachings of his fellow-prisoners, that boy became an accomplished crook; and thus one who might probably have become a useful citizen is now a menace to the community to which he has returned as a creature of prey. How differently is a similar case worked out in the Children's Court! The boy was a neat little fellow of twelve years. He had been caught tossing pebbles at a train going through the Park Avenue cut. There was no denial of the charge. The prisoner was pale and shaking when he was arraigned. "I did n't mean no harm, please," he pleaded.

"Suppose you had been in that train, and some other boy had thrown a stone and it had gone through the window and hit you," said the judge; "or, suppose your mother had been sitting there; suppose the stone you threw had struck her in the

The little fellow's eyes filled. His throat quivered, but he braced his shoulders back manfully and said:-

"Judge, what are you going to do to me? I guess I ought to get it."

"Nothing, this time, my boy," said Justice Mayer, "but just keep it in mind that there are other people to consider in this world besides

The City Is Responsible for Some of Its Bad Boys

Of course it's possible that the boy may grow up a murderer or a pickpocket, and have his picture beside that one which the Special Sessions' judge put in the Rogues' Gallery in the earlier case; but the chances are

that his experience with the court will have taught him the first lesson of good citizenship, -to consider one's neighbor.

As case after case came up, I was more and more impressed with the fact that most of the children were charged with what the law calls crime and common sense calls mischief. These charges the court disposed of, not with any sentimental ruling of the necessities of the case, but without harshness, and only with such severity as was necessary to instill a wholesome respect for the law into the mind of the lawbreaker. Some of these suggested sins of the city against the children, rather than sins of the children against the city. There were boys arrested for playDigitizationty, baseball, pogo
cat, and other healthful "To give it to me girl







"Often parents come with their children to plead for them, or to have them put in some safe institution "

games,—illegally, it is true, but what form of amusement would the repressive laws substitute? Craps in a back room?—pool in one of the twoand-a-half-cent joints that are mostly kindergartens to a course of crime? or those adroit pastimes in to a course or crime? or those auroit pasumes in tenement rear rooms led by light-fingered gentry who practice the delicate lifting of a purse or a handkerchief from a "dummy" for the emulation of the admiring young? When New York City shall provide space for the natural sports of out-deer leaving. American children the Children's door-loving American children, the Children's Court will have fewer cases.

Not all the offenses charged, however, were so trivial. A furtive-eyed fifteen-year-old lad was arraigned for picking pockets. He was well dressed and intelligent-looking, but there was the sharp, uneasy look that so often characterizes the born criminal. His was a case beyond hope of correction, for he had previously been arrested three times for like offenses. His parents were people of respectability and some means, and they had arrayed on his behalf a small army of lawyers and politicians, and had tried every means to work a "pull." The boy himself pleaded volubly for "another show." But this was no occasion for one more chance. The only thing to be considered many the public. No sidered was the protection of the public. No association with convicts could make this youth more criminal than he already was; so, desperate pleas and pulls in vain, he "went up.

This Eight-year-old Boy Was a Pickpocket

On the court's records is another case of juvenile depravity much more disheartening. An eight-year-old boy was taken up on the same charge. At first the judge declined to believe that he was a pickpocket, until he learned that the little fellow had been twice caught extracting purses from pockets in crowded street cars. More-

over, he was a member of a "dip mob" which works the main thoroughfares of the east side of the city, and no less than three benches in the court room were taken up by members of the gang who had come to see the "Fly Kid" on trial. His was another hopeless case.

In fact, cases of theft, except those of metal stealing from vacant houses by ignorant Italian boys, are generally indica-tive of a distinct criminal bent. Even here, however, there may be circumstances that mitigate. A twelve-year-old boy, who here may be called William Jackson, was brought up to face a charge of stealing a girl's coat from a store. When arraigned, he was sullen and defiant.

"Yes; I took it," he replied to the judge's question. "The cop seen me, did n't he? What's

the use of sayin' I did n't?''
"What did you want to do
with the coat?"

'To give it to me girl,'' said the boy, recklessly. Now, as every judge of a criminal court knows, a boy who steals for a girl is usually an irreclaimable criminal. It is difficult to say just what will become of him, so the judge's face hardened as he asked, "Who is the girl?"

The boy stood scowling.

"Did you hear me? Who is the girl?"

"Ah, I heard you all right, but I ain't squealin'.

Get her into trouble, too? I guess not!"

"Did she know you stole it for her?"

"Then you won't get her into any trouble by telling me who she is.

But Jackson was suspicious and refused to reply. The judge took another tack.

"You are in a pretty serious scrape, Jackson Is there anyone here to say a good word for you? Silence.

"Is your father in court?"
"Nah; he's dead."

"Is your mother dead, too?"

The prisoner shook his head.

'Where is she?

His eyes began to blink, and the corners of his mouth quivered.

"Why has n't she come to court to help you out of your trouble?'

_I dunno.'

The recklessness had gone out of his voice, and

in it there was a new note of pain.
"Yes; you do know," insisted the judge, seeing that there was something beyond this and anxious to give the boy every chance, for his was not the type that impresses with the belief of guilt. "Why is n't she here?"

"Because she don't give a blank for us,—for e," blurted the boy, and he burst into tears.

"Jackson, I was going to sentence you," said the judge; "but there is something here you are hiding from me. I'll hold your case over now. Once more, will you tell me how you came to steal for this girl?"

Billy's Heart Was in the Right Place

"Not if you was to hang me," said the boy.

Before court closed that day, an officer, stepping outside for a breath of air, saw a little girl pressing a tear-stained face against the railing. She shrank back as he gently asked her what she was doing. Even the policemen are kind in this court. Presently she lisped that she wanted to see Billy Jackson. She was, perhaps, ten years old, ill clad, and shivering. It looked like one of those ugly cases of child-infatuation around which the yellow jour-nals weave their tawdry romances. She was taken before the judge, who asked her, "Did you come here to see William Jackson?'

"Yes, sir. Please, what did they do to him?" "Wait a moment. Did he steal the coat for you?''

"Oh, no, sir; no, sir," she said, beginning to cry. "Billy's a good boy. Billy would n't steal. Why did the policeman take Billy away?"

"Why do you think he would n't steal?"
"Why, he's my brother," said the child, simply. Then, in little, painful gasps, she told their story:

of the mother who had taken to drink and dissolute companions, and who sometimes was not at home for days at a time; of Billy's brave attempts to keep things going, ["Billy's real smart. He makes two or three dollars, some weeks," she said, proudly.] of her own longing to have a nice coat to wear to school, as the other girls, it seemed, had jeered at her rags; of how Billy had promised to get her one, and had severely kicked the most jeerful little girl, by which it will be seen that chivalry in the slums assumes unconventional phases. So Billy was brought forth again, and phases. tried to break loose and run away when he saw his sister; but he was finally convinced that things were looking up for both of them. There was a brief interview with the judge, in which Billy's sister bore an important part, and Billy will not go to the reformatory this time. Somehow, a job will be found for him, and his sister will be put where he can see her often, and the family will be on a better basis than before the temptation of the coat seized on the soul of Billy.

-B-CORY-KILVERT-

Few girls are arraigned in the Children's Court; perhaps only one to every ten boys, but the per-centage of criminality in the cases of the girls is much greater than in those of the rougher sex. The most appalling feature of the court is the number of mothers who bring young girls,—girls under fourteen, many of them,—and in broken voices beg the judge to put them into some safe institution

"Can't do anything with her, your Honor. She was out all night, last Saturday, spends money which I do n't give her, and has clothes I never bought Oh, what'll ever become of her?

In Cool Deception, the Girls Outshine the Boys

So runs the pitiful tale of degradation, ending commonly in a burst of tears, while the cause of the sorrow, likely enough, stands by with a contemptuous smile on her face. But there is another side to each case. The watchful superintendent of the Society for the Prevention of Cruelty to Children is there to follow it up. Back of each of these black stories there are men for whom no court has any leniency, and, if these men do not eventually land in state prison, it is not the fault of the society and its officers, for such cases are re-







Waiting for the verdi

lentlessly followed to the last clue.

For cool deception, the girl criminal takes precedence of her brother. Recentan angel-faced child of fourteen years was a witness in the trial of a chum who was accused of having stolen several hundred dollars from Miss Angelface's mother. The detectives, following Miss Angelface's directions, had arrested the chum and found most of the money on her. But the judge was not quite satisfied. He postponed the case. Miss Angelface went home and in succeeding days proceeded to flood the neighborhood with ice cream

and bonbons. She appeared in new and costly raiment, and embellished herself with a new watch and locket. Her popularity in the youthful circles in which she moved waxed great, but not so in her home. Her mother, following ancient and approved (if unjudicial,) methods, extracted from her a confession, punctuated with loud yells. Miss Angelface had seen the old lady hide her roll of money under the carpet, which is a method of banking much in vogue on the East Side. She extracted it, took what she needed, and, in a manner worthy of a trained crook, to divert suspicion, "planted" the rest on her chum, who happened in opportunely. Then she caused the ar est of the chum. For cold-blooded depravity tha' case is considered a record in the Children's Count.

The court is young yet, but of its value there can be no question. It is more like a corrective and reclamatory institution than a criminal count. Its underlying principle is not so much to protect the public by putting out of the way every youngster who violates the law as a menace to the common welfare, as it is to set that boy right and make of him a good citizen, thereby adding one unit to the public weal. Then, too, there is a disposition to hold to responsibility, whenever possible,

those who have permitted the boy or girl to run counter to the law; to protect the young against those who should be their guardians. This work the Society for the Prevention of Cruelty to Children, which is practically the court's investigating agent, undertakes.

A word is to be said of the two justices who have thus far presided over the court. Those upon whom they sit in judgment are inhabitants of another world: the world of childhood, where all the proportions of things are different. They must sift truth from falsehood in the utterances of those who often do not know how to tell the truth. They must judge of motives which they themselves have long lost; and the failure, if they fail, is tragic indeed, for it means the blighting of a life almost from the beginnings of usefulness, for some fault that in its final analysis may be, and probably is, in the mind of the unfortunate perpetrator, trivial; as if a man should be put to life imprisonment in a foreign land for infraction of a law which to him may seem ridiculcus. But Justice Willard Olmsted, who was the first judge to sit on that bench, and to whom credit must be given for the principles on which the court is conducted, and Justice Julius Mayer, who is associated with him, are men singularly fitted for the work. Each is young enough to keep still fresh within him something of the spirit of boyhood; both are men of tact and kindliness, and, what is even more, of unlimited patience. Each feels deeply the court's responsibility, surely the greatest in its far-reaching influences that rests upon any judiciary office in the city, and, if they err, as sometimes they must, it will be on the side of mercy. They are trying to make men and women, more than punishing offenders.

The problem of the cities to-day is the saving of those who are born into an environment of ignorance and of the physical and moral uncleanliness that are its natural concomitants. For these, the Children's Court is, in many cases, the first check on the path to criminality. It acts in loco parentis at the time of greatest need. The corollary follows that the city which has slums needs a Children's Court to sift out the young offenders from the old and save them to the state. In the smaller cities there is, perhaps, no great need of such an institution; there the home element is strong and public responsibility for those unfortunates from whom the proper private responsibility has fallen away is keen. But in the great centers of population, the Children's Court, one may venture to predict, will soon be recognized as a necessity. Chicago has the pioneer tribunal of this kind, and nobly it has proved itself. Boston, Denver, and



At the bar of justice [Sketched from life

Baltimore have followed Chicago's lead, all with marked success. Philadelphia has established a court, but its constitutionality has been called in question, and decision is still pending. Indeed, all these courts have encountered difficulties of constitutional law, and in some cases it has required adroit twistings and evasions in order to dodge the inalienable right of trial by jury. St. Louis, San Francisco, New Orleans, Pittsburg, and Cincinnati are some of the communities which might well take up the movement. As an advance in civilization, as a realization of the higher civic responsibilities, as an agency for the nation's good, such an institution can hardly be rated too high. Even looking at it from the more practical viewpoint, one who has seen its workings cannot but feel that, purely as an investment, it will pay heavy dividends in the long run. For it costs money to make and educate criminals; money for prisons and prison guards to watch the criminals in the making; more money for police and detectives to pursue them,—too often to prey upon them,—after they are made. Any system which turns the potential criminal aside and which gives him one more chance will, in the long run, pay whether you reckon the result in standards of dollars and cents, or of morality and citizenship.

Mark Twain's Advice Brought Grant a Fortune GARLAND

In the fall of 1880, after President Grant had been defeated for renomination and had retired from politics, he found himself out of employment with a very moderate income. Through the influence of his family he entered into a special partnership with Ferdinand Ward, a Wall Street broker, under the firm name, "Grant and Ward."

His office was at one corner of Wall Street and Broadway, and, without being especially active in the business, he nevertheless made it a rule to spend a part of every day at his desk, giving at least general supervision to the business.

One day the cards of two very distinguished visitors were brought to him, being those of Samuel L Clemens and William Dean Howells. The general received these well-known literary gentlemen with his accustomed self-command, inviting them to be seated and to share his frugal lunch, which they observed to be baked beans, brown bread,

and coffee. The general made no excuse for eating so plain a lunch and manifested his appreciation of the character of his visitors rather by the subjects of conversation. He ventured very soon into some brief remarks concerning the novels he had read in his youth, saying that he regretted that his official duties for many years had pre-

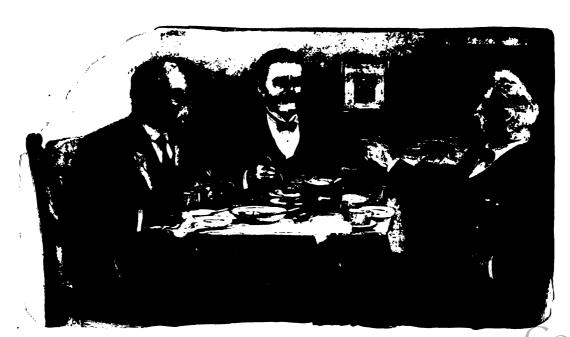
vented him from reading as much as he otherwise would have liked to do. He seemed not to feel in any way his own great fame, and there was a certain pathos in his attempt to meet his visitors halfway. He was plainly out of his element and somewhat ill at ease. The books which he mentioned were old-time novels and histories which are on the

which are on the doubtful edge of literature as it is understood to-day, although included among the list were names still famous, like Motley, Creasy, Thackeray, Scott, and Lever.

Mr. Clemens changed the subject at length by saying, "General, why don't you write your memoirs?"

"Oh, I'm not a writer," replied the general; "I am not fitted for that. Sherman could write, and so could Halleck, but I have no gift that way."

way."
Mr. Clemens took issue with him and said that it was his duty to do so, for



General Grant invited Mr. Clemens and Mr. Howells to share his lunch of beans, brown bread, and coffee there were points con-

cerning the war which

only the principal actor

in it could clear up.

"As you know, General, I have had some

books published my-

self, and I know my publishers would be

very glad to take up

your book at any time.

I am not connected

with them in any way,

except as an author,

but I'm sure they would

do very well by you. If

you like, I will present

The general, how-

ever, seemed to consider

such a book quite out

of the question, and nothing further was said

about it. Mr. Clemens

went abroad soon afterwards.and did not return

for several years. Im-

the matter for you.

A Mother Believed In Him, Long Ago - Alfred J. Waterhouse

Mr. Clemens was amused and astonished at the

general's simplicity. "Suppose they do; that's

their business. You ought to have seventy-five per cent of all the profits, the publishers to do all

the work, pay all the advertising, clerk hire, and

every other expense. Why, General, there is a for-

tune for you in this book, and you must not allow yourself to be deprived of your just share.'

The general still remained unmoved and uncon-

sand dollars, which is the amount Sherman got, and I'm quite satisfied."

matter is to go to these people with my proposi-

tion, demand seventy-five per cent. of the profits

on the basis I have just named, or twenty-two and a half per cent on subscription sales,—that is, sales

by agents,—or thirty per cent. on trade sales; they'll take it," concluded Mr. Clemens.
"You must be mistaken," the general replied, showing that what Mr. Clemens said had had its

Mr. Clemens arose. "I'm a publisher, and I'm here to do just that. You try your people on my proposition, and, if they do n't come to it, you

"I guess I'll let them have it. They guarantee

me twenty-five thousand dollars out of it, you

know," the general said, at length, as if the matter were settled.

It Was almost Impossible to Convince the General

Mr. Clemens then said to him, very earnestiy: "General, you must n't sacrifice yourself in this

You are ignorant of these matters.

know all about war, and I know a whole iot about the book business. You take my advice; you

a great deal of money. Now, I'll tell you what I'll

do to convince you that I'm in earnest; I'll draw

a check right here for fifty thousand dollars on

your royalty account, and guarantee you as much

more when the manuscript is put into my hands.

I calculate you are worth just ten times as much as

I am as an author, -in this case, at least I real-

ized, on my last book, upward of sixty thousand dollars. Even if you publish at two dollars and

fifty cents and sell through the trade, you'll get,

say, seventy-five cents on every copy; that will

make you, say, five hundred thousand dollars; or,

to make a conservative estimate, we will say three

hundred thousand dollars. You see, I've been

publishing subscription books for twenty years, and I know what can be done. Your book will

sell on sight, and, in my judgment, will sell six hundred thousand copies. There is a fortune in the book, and I know it, and I'm willing to guar-

need money, and here is a chance to earn money,

effect; "no publisher would give that."

return to me and I'll make my offer good."

Mr. Clemens persisted. "The way to test this

"They guarantee me twenty-five thou-

His face like a map of the Country of Sin; Knowing no hope and winning no prize, Callous without and hardened within,— Room for him still on the great highway! Comrade of shame and companion of woe; Look where he staggers, and softly say: "A mother believed in him, long ago."

wee little babe, on her bosom he lay, And gently she chanted an old, sweet song: "Hushaby, lullaby: ever, alway, His white angels guard thee from error and wrong."

And his lips were pure as a thought of God, And his eyes were bright, that are heavy and dim,

As the sleep-angels bore him, o'er fields untrod. There where the twilight was singing its hymn.

Time-worn, weather-beaten, with dim, bleared dreamed, weather - beaten,—and yet she eyes,

With love in her eyes, as a mother must; And she saw where the sunlight over him streamed,

And the prayer in her heart was the prayer of trust.

A mother believed in him, long ago,-This is his passport to heights of peace Where we walk no more with error and woe And the pain and the travail forever cease.

Only a wreck, 'mid the wrecks of men, Crushed in the battle; lost, forlorn, Staggering on, through mire and fen, Yet to hope's heritage he was born. Make room for him, then, on the great highway!

Whither 't will lead him we may not know, Out of the maze of doubt and dismay, Since a mother believed in him, long ago.

courtesy, and the interview closed. Mr. Clemens went away feeling quite sure that the other publishers would accept the proposition, and that he had helped to put a large sum of money into the general's hands.

The publishers lis-tened to Colonel Grant's demands in silence, and asked time to consider. It was, they said, a most extraordinary royalty, and it was necessary to figure very carefully before returning an answer. In a very few hours, however, they replied that they had decided to acquiesce in General Grant's demands.

However, when Colo-

nel Grant brought the new contract to his father to sign, the old general very quietly said, "No, if the business is to be as profitable as these people seem to think it, then it must go to Mr. Clemens, who has enabled us to secure such a splendid offer."

The Book Would Keep His Family from Want

This decision, so characteristic of Grant, remained unalterable; the contract with C. L. Webster and Company was at once signed, and the old warrior, weak and suffering from a painful ulcer in his throat, set to work in grim earnest. He had a premonition of the short time in which he would be able to do this work, and he knew now the importance of it. He was rearing a bulwark between his wife and children and the forces of want, and it was his hope that he might be able, in this way, to shield them when he should be no longer in the flesh.

The firm advanced him money as he needed it, and pushed the printing of the book as fast as the manuscript appeared from his pen. Everything that could be done to make his task easy was done by Mr. Clemens. Many times the humorist went out of his way to please the general.

The closing scene of this remarkable transaction took place at Mount McGregor, when the old commander was nearing his last day on earth. He had finished what he considered the important and essential parts of his life's story. His hand refused to write any more. The book was almost entirely in type, and he was waiting with great eagerness to see it completed and from the

Mr. Clemens visited him there for the last time. The general had gone beyond speech, for the ulcer had developed into a malignant cancer, which had at length laid hold upon the vocal chords, silencing him forever. He could only write with painful care, on a pad which he held on his

"Well, how is the book coming on?" was his penciled inquiry.

He then Knew that His Wife Would Be Provided for

"Very well," replied Clemens; "it will be out very soon.

The general wanted to know definitely what might be expected from it in the way of exact

To this Mr. Clemens was able to reply, "General, there is in the bank, now, royalty on advance sales aggregating nearly three hundred thousand It is at Mrs. Grant's order, General, and you need not fear for her future."

The general's face lighted with pleasure, and he expressed his satisfaction and his warm gratitude to Clemens by gesture and by means of the pencil in his hand.

Mr. Clemens shook hands with the old commander and went down the hill feeling deeply pleased to have been able thus to comfort a dying man. His own troubles were afar off, and when they came had nothing to do with the book, the sales of which were even greater than he had anticipated.

Thus it was that General Grant died with the knowledge that his wife was provided for far beyond any of his most hopeful anticipations. That it was due to the generosity and the enthusiasm of Mark Twain there is no shadow of doubt.

most disgraceful financial entanglement. In addition to this, the general himself was ill and rapidly growing old. He Valued Each Chapter at Five Hundred Dollars

mediately upon his return he heard of General

Grant's condition, which was at that time deplorable. Ferdinand Ward had failed, involving the

general and his sons and many of their friends in

One rainy night in the autumn, as Mr. Clemens was leaving a theater on Broadway, he heard a voice which was entirely strange to him utter these suggestive words, "They say General Grant is going to write his memoirs, after all.'

Mr. Clemens saw neither the man nor his companion, but regarded the voice as essentially providential. He was at that time a partner in the extremely successful firm of Charles L. Webster and Company, and considered himself in luck to have heard so early in the transaction the news of

General Grant's intention to write the book. Early the next morning he sent in his card at the general's residence, and was received by the latter in the library, where he was evidently at work at that very time upon the story of his life. The house in which he lived was on Sixty-sixth Street, near Central Park, and, being quite feeble at the

time, he spent most of his days at home.
"Well, General," said Mr. Clemens, "I hear that you are writing your story, after all?

"Yes, I've written three chapters already, and the editors seem to like them very well. The fact is," he added, with a look that expressed a certain timidity, "I'm glad to be able to earn a little money in this way, just now."

"I hope you'll get well paid for them," said Mr. Clemens.

"I think I'm very well paid," he replied; "I get five hundred dollars apiece for them.

Mr. Clemens expressed great surprise. "Why, General, you can't afford to let that matter go at that rate. Five thousand dollars would be cheap for them."

The general remained unmoved. "I'm getting more than Sherman got," he replied, quietly, "and I'm satisfied.'

He Should Have Had four Times as much Royalty

"What about the book?" inquired Mr. Clemens, seeing that the general was indeed thoroughly satisfied with the serial rights.

The general took up a paper which lay on the table before him. "I'm about to sign a contract;

Mr. Clemens was deeply interested. "Would you mind letting me see that paper, General?"
"Not at all," the latter replied, handing the

document to Mr. Clemens, who read it in amazement. At the end he said, in his peculiar drawling voice, "General, why do n't you just give it to

"I don't understand you?"
"Why, if I were you," continued Mr. Clemens, "I wouldn't bother about any royalty at all." Then, changing his tone and becoming serious, he said, "General Grant, you should have four times the amount of royalty named in this paper. This contract is absurd; you must not sign away your valuable rights."

"But, you see," the general explained, "the publishers not only give me ten per cent., but they bear all the expenses of publication."

Mark Twain Won, and Grant's Publishers Agreed

At this point the general's son, Colonel Frederick D. Grant, who had been listening, took the contract from his father's hand and said, "Mr. Clemens has convinced me that we have not sufficiently investigated this matter; we must look into it a little further before you sign this paper. I'll go to the company at once with a proposition such as Mr. Clemens suggests, and see what they

say."
"They'll take it," said Mr. Clemens, with a smile; "no doubt of that."

The general thanked him for his interest and

The Progress of the Busy World Told In

















JOSEPH G. CANNON CHAS. E. LITTLEFIELD JAMES S. SHERMAN will probably be chosen is one of President speaker of the 58th U.S. Roosevelt's strong tarhouse of representatives iff-reform supporters

JAMES 8. SHERMAN is a vigorous worker in the Ways and Means Committee of congress treaty with Canada

MISS J. N. BISHOP FRANK NORRIS MICHAEL H. HERBERT comes from Great Britlning Board of Schoolteachers of Alabama snovel, "The Octopus" sador at Washington MICHAEL H. HERBERT

JOSE V. CONCHA

Is American prosperity in danger from lack of a convertible capital?—Important facts revealed by the recent elections—Success-qualifications of Speaker J. C. Cannon—What union labor gained by the coal strike

Is our great prosperity in danger? For the last three months this has been the uppermost question in the minds of bankers and business men in general, and their views have been very divergent. In November, some half a dozen of the country's great railroad presidents had the salaries of certain of their employees raised ten per cent., saying, at the time, that outstanding contracts insure the country's prosperity for two more years at least. Just previous to this event, Frank A. Vanderlip, one of the vice presidents of the National City Bank, of New York, the biggest banking institution in our country, delivered a lecture at Wilmington, North Carolina, in which he sounded a distinct note of warning. He pointed out some facts which seem to mean that the country has already passed the zenith of its prosperity. Our exports of manufactures for the fiscal year have fallen \$30,000,000 below the mark they reached two years ago, and our total exports of domestic merchandise have fallen off \$100,000,000 from the figures of 1899. The national banks have increased their liabilities in deposit from \$3,226,000,000, in 1899, to \$4,527,000,000, in 1902, and at the same time the banks hold now only \$508,000,000 in specie and legal tender against \$509,000,000 in the beginning of 1899. Here we have had \$1,300,000,000 of deposit-expansion, while the basis of gold and legal tender, upon which that inverted pyramid rests, is actually less than it was in 1899. In state banks, savings banks, and trust companies, there has been an increase of deposits of some \$3,000,000,000, or an increase of over \$4,000,000,000 in deposits in all the country banks, with no increase in the specie and legal tender holdings in these banks. Mr. Vanderlip says that these facts are explained by the enormous growth and development of corporations, withdrawing capital from individual small industries and depositing it in banks, and the great expenditures made by railroad and other corporations in the improvement of their properties. He is of the opinion that enormous sums expended for improvements in the properties of corporate concerns will not yield enough profit to keep a sufficient volume of fluid, convertible capital in the market. This accounts for the scarcity of money last fall to move the crops. Industrial of their accounts for the scarcity of money last fall to move the crops. try and commerce may put so much of their capital into fixed forms as to bring on a panic. Mr. Vanderlip foresees this danger in the great internal improvements in progress. He would have us stop drawing so much upon the future. It may be said that, since his figures have appeared, many financial writers have taken issue with him. The editor of the "Financial Age," the organ of the national banks, calls some of Mr. Vanderlip's statements erroneous, and declares they do not indicate conditions in the least alarming. This writer admits that our operations abroad have been temporarily checked, and thinks it well for us; for, had we continued the pace of the invasion of Europe in 1898 and 1899, we might have provoked a European combination against us before being ready to meet it. The real foundation of our prosperity, he declares, was the unalterable decision in 1896 that we would not have free silver. That question, so long before the American people, having finally been settled, he sees no real indications of a storm in our financial skies. It is never well to shut our eyes to facts, but the chief factor in our prosperity is public confidence. People are constitutionally inclined to believe that every period of prosperity must end in a great smash to be followed by a season of hard times. They think about it and talk about it, and as a consequence begin to hoard their money. The smash comes, and they argue that it will come again, but there does not appear now any very good reason for hard times, except this constitutional element

THE recent elections demonstrated three facts of great importance: that public sentiment is again free and easy, and without very strong feelings in any direction; that the personal popularity of President Roosevelt is probably equal to that of any other man who ever held the office; and that a strong political cleavage has sprung up between the populations of the great cities and those of the rural districts. The tariff and the trusts were the only real national issues. The great masses of the people believe that the only real national issues. The great masses of the people believe that their prosperity is founded on a high tariff, and the clear and straightforward pleas for a reduction have not reached their hearts, although they are in a mood to listen. They do not understand the trusts very clearly, although a majority of the people are convinced that these institutions should be subjected to some sort of control. Many men, more men than ever before went to the polls, are saying to themselves, "We can't vote against the President. Between sustaining him in the course of his splendid administration and administrating a well-deserved rebuke to his party we will choose the for and administering a well-deserved rebuke to his party, we will choose the former." Hence, instead of sending a Democratic majority to the house of representatives and tying the hands of Roosevelt, the Republican majority of forty-one was cut to twenty-six,—an emphatic warning to the dominant party that it must have a care, that it must grant reciprocity to Cuba, and must

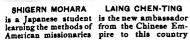
deal with the tariff and the trusts without menacing our prosperity. The Republican party has received this extension of grace from a public opinion that is not to be trifled with. In New York, Boston, Providence, and in many New England towns, the Democrats rolled up unprecedented pluralities, while the Republicans more than held their own in the adjoining rural com-munities. The late coal strike was an influential factor in the cities, and in New York Mayor Low's rather feeble reform administration, and his obnoxious Republican partisanship in the campaign, had no little to do with making Democratic votes. But the fact remains that there is a growing hostility in modes of political thought between farmers and city men, and more especially is this true in New York State, for which condition both parties are responsible, more especially the Republican, which has sought, in season and out, to array farmers against dwellers in the cities. The chief city, with only half of the population, and with only about two-thirds of the state's wealth, is denied an equal representation in the legislature, and is made to pay ninety per cent. of the state's taxes. This injustice of "up-state" politicians has forced upon many the conclusion that New York City should be made a state of itself. In the West, the Republican party won back nearly all it lost by the friends of free silver, and the South, with the disfranchising of the negroes, becomes more solidly Democratic than before. Strange to say, with the tendency of the people again toward the Democratic party, the election brought out no new national leader, although it shelved most of the old ones.

JOSEPH G. CANNON, the prospective speaker of the house of the fifty-eighth congress, is the strongest man in that body since the days of Thomas B. Reed, and as speaker of that huge parliamentary assembly he promises to rival, in interest, Reed himself. Cannon will be less governed by rules and precedents than any other man who has ever occupied that chair. Indeed, he is a rule unto himself, a picturesque, rugged, independent character, so ready to fight and so valiant in a fight that the high chair and the gavel may seem a burden to him at times. "Uncle Joe" Cannon, as he is affectionately known, was born in Guilford County, North Carolina, in 1835, of Friends, and, although possessing many of the fine qualities of his non-resistant ancestry, the West has developed in him his rugged character and aggressiveness. He has been in congress for nearly thirty years, and for the last few years has served as chairman of the committee on appropriations, the committee ranking second in the house. His best work has been his dauntless opposition to extravagance. He has saved the government many millions by his opposition to useless public buildings, and other visionary schemes for looting the treasury, but what he thinks on any public question, especially upon the tariff, must now be of unusual interest, for a strong speaker is now practically the house. If Mr. Cannon is in accord with the President and other liberal members of the Republican party in believing that some of the tariff schedules should be reformed, he is likely to give prominent committee places to men like Babcock, of Wisconsin, and Littlefield, of Maine. The latter, it is said, understands Mr. Roosevelt's views on the tariff and the trusts better than any other man in the house.

What has union labor gained by the coal strike? "Arbitration in all future strikes, wherein a prime necessity of life is at stake," was the answer of one of the prominent labor leaders. The effect has been to greatly strengthen the unions by driving many outsiders into them, by giving them a higher standing in public opinion, and by convincing employees in some of the professions that it is to their interest to form unions with the same aims; namely, to raise wages and cut down hours of labor. Chicago school-teachers have demanded that they shall be taken into the labor unions, so that they may more easily secure their rights. This is, perhaps, the most significant event since the coal strike ended, as it indicates how deep down into the heart of society this victory for arbitration has gone. The school-teachers, as a class, are rather poorly paid for their services. If they are to join labor unions, and strike on the strength of their grievances, why not clerks and typewriters, newspaper reporters, and, indeed, everybody in the ranks of professional workers? One class of workers has as much right as another, and, the greater the number of classes of workers, combined, the more powerful a strike will become, and the greater will be the temptation to resort to it. According to the tendency of the times, we may yet witness the coal miners in Pennsylvania taxing themselves to help the New York school-teachers, or dry-goods clerks, to add two dollars apiece a week to their salaries. If society should get well on the road in this direction, only some Edward Bellamy can imagine where it will stop. But the money trusts set the example, and men like J. Pierpont Morgan and John D. Rockefeller should be the very last to open their mouths against socialism, for they are the greatest socialists of their time. The success and power of their great organizations tend to provoke all classes of society to imitation of their methods and aims, They must face the inevitable rivalry and possibly be forced to grant coalition.

Personalities and Problems of the Hour











C. WESLEY THOMAS

has been appointed U.S. is the first woman muhas gone to South Afcollector of Customs for Philadelphia, Pa.

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EZEKIEL LEAVITT JAMES R. WHEELOCK is a Russian who is a full-blooded Inthinks Tolstoi has not dian who excels in been well translated playing the clarionet

GERMANY, according to the English press, has reached a stage in her career when England must take no doubtful measures in dealing with her. The recent visit of the German kaiser to his uncle, King Edward VII., is a striking illustration of how far the British distrust the Germans. What the kaiser's business was in going to England, beyond a friendly visit to his chief kinsman, has not yet been made known, but we are told that it was to entrap England into a dangerous alliance with Germany. The latter, it is said, is a practically isolated power to-day, the triple alliance having no real cohesion, hence she is out seeking friends, and her diplomacy is busily engaged in trying to oppose friendly powers to each other. According to the "London Spectator" and the "National Review," German diplomacy is a mixture of insolence, intrigue, and seduction: insolence toward those she is not afraid of; intrigue among strong neighbors to cause them to hate each other; and seduction toward the strong whom she wishes to make use of. During the Boer War, the Germans unmercifully lampooned the English, and, now that the war is settled in England's favor, there is a change of front, and the emperor wants an alliance. The English people will not hear of it, and the English press has taken great pains to warn us that Germany, through her ambassador at Washington, has reached some sort of understanding with German-Americans in case trouble should spring up between the United States and Germany. It will be difficult to make us believe this, for no foreign-born citizens seem to be more attached to their adopted country than are the Germans. That Germany would like to control this element of our population is not for a moment doubted, but these people left their fatherland for good and sufficient reasons, and their success in the freest and best country in the world binds them to their new home with ties that no former sentiments can sunder. It is not to be wondered at that Germany is alive to her position. Wedged in between France and Russia, and with a soil too poor to feed her rapidly increasing population, she has had to give millions of the best of them up without being able to send the flag along with them. It is her pride and enterprise that have made her so land-hungry, and this is her danger and the danger to Europe, and, perhaps,

THE commercial and financial center of the world is now no longer London, but New York City, according to Brooks Adams in his latest book, "The New Empire." When Pittsburg, in 1897, succeeded in underselling all the world in steel, the world's money center began to move derselling all the world in steel, the world's money center began to move slowly from the other side to this side of the Atlantic. Simultaneously the political center began to move to Washington, which is now fast becoming the political, diplomatic, and social hub of the globe. The social life in Washington, this season, is no longer local, but national and indeed international. Washington is no longer the most uninteresting post for Europe's great diplomats, but this capital is now being preferred by them. So attractive is it that even our own rich people are going there instead of abroad. National scientists and artists are taking up their abodes there, to be joined very soon by their international brethren, for Washington is a capital joined very soon by their international brethren, for Washington is a capital that will have as good as the best in Paris, London, Berlin, and Vienna. It is the city magnificent, to be the city beautiful, the house of pleasure, the home of ideas, and the patron of all the best there is in the world, and yet it must remain democratic. It should never forget that Thomas Jefferson, the third president of the United States, hitched his horse to the White House fence when he arrived there to take the helm of government.

The Australian federation, in framing and adopting a constitution, copied almost to the letter the constitution of the United States, but these almost to the letter the constitution of the United States, but diese united colonies—if united we may call them,—are finding no little difficulty in putting their constitution into force. Indeed, some of them are decidedly unwilling to be taxed for the general welfare, and they have not as yet agreed upon a capital, or to pay the governor-general a sufficient salary to support the dignity of his office. The worst trouble, however, seems to be that clause in their constitution creating a supreme court with seems to be that clause in their constitution creating a supreme court with unlimited powers in construing the constitution. Some leading Australians have no more confidence in the wisdom of such a court than Thomas Jefferson had, and, in the weak state of union now prevailing in the federated colonies, the federation may go to pieces on this very rock. Australia evidently needs some great judge, like John Marshall, to teach her cabinet, narliament and how they shall parliament, and people what the constitution means, and how they shall obey its mandates. What has saved our constitution has been the wisdom and incorruptibility of its interpreters and the sagacity of men like Lincoln when they in time of war interpreted it for themselves.

CONGRESS must make up its mind to deal in earnest with the dangerous deficiency in the number of officers in the navy. Just before the West India maneuvers began, last month, Rear Admiral H. C. Taylor, the chief of the bureau of navigation, pointed out the fact that the navy is now short 577 men, and that, when the new vessels authorized by congress, but still unfinished, are put into commission, the shortage will then be Germany's unusual cordiality toward Great Britain—New York City is the commercial center of the world—The failure of Australian federation—A dangerous scarcity of naval officers-Chamberlain's visit to South Africa

1,360 men. If we were threatened with war,—and no one knows at what moment we may be, for bolts have not ceased to come from the blue, - such a shortage of men in our navy would be a most serious calamity, for it requires time to train a naval officer as it does to build a battleship. It is a notorious fact that only forty-five per cent. of the young men who go to Annotorious fact that only forty-five per cent, of the young men who go to Annapolis are ever graduated into naval officers, the standard being so high, and the discipline so severe. The system of promotion in the navy is so imperfect that men grow old before they are ever given command of ships. Last summer, in the naval maneuvers off the coast of New York, there were several suicides among the officers. Middle-aged men were, for the first time in their lives, told to command ships. Some of them lost their bands and deshed their lives out. There is no very in mineing fort for the heads, and dashed their lives out. There is no use in mincing facts, for the whole service is more or less demoralized as a result of the present system. We do not have enough officers, and the method of promotion has rendered many of them incompetent for high service. A good naval officer is now much more of an expert machinist than sailor, and, if Annapolis cannot train enough men for the service, our best technical schools should be pressed into service, and the naval reserve should be built up. Secretary Moody, it is understood, will do his best to get some reformatory measure on this subject through congress at this session.

JOSEPH CHAMBERLAIN, the British colonial secretary, has gone to South Africa to learn, on the spot, how best to do five important things: how to get the Dutch majority in Cape Colony to become loyal; how to restock the farms in the Transvaal and Orange River Colonies; what part of the war debt the Rand mines should pay; how all these colonies can be federated to the best advantage; and how to fill the country with English immigrants. It is a big task, but one of the keenest-eyed men in all this world has gone to look it over. The future of South Africa is problematical. If Great Britain can hold this territory for twenty-five years, it will doubtless become the most important colony of the empire. Benjamin Kidd, who has lately returned from there, declares it is a richer region than that part of our own country west of the Mississippi River. Mr. Kidd is himself a keen observer, and, if he is anywhere near correct in this opinion, South Africa must become a safety valve for Europe in the twentieth century, as America was in the nineteenth. The twentieth century belongs to America and South Africa.

CHARLES WILLIAM ELIOT, President of Harvard University, holds the public schools responsible for almost every shortcoming in society. He says that, for more than a generation, we have been struggling with drunkenness through prohibitory laws, and yet popular education has not made the people sufficiently intelligent to execute these laws; that gambling is an extraordinarily unintelligent form of excitement, but the majority of the people are still too ignorant to stamp it out; that universal suffrage produces bad government, especially in large cities; that the gravest crimes of violence are prevalent all over the United States; that the American people buy tons of pernicious trash to read; that our theaters present vulgar, disgusting plays, and that Americans are curiously subject to medical delusions. They buy all sorts of patent medicines, and trust themselves to healers' fakes. Labor strikes are occurring more frequently and are wider in their vicious effects. President Eliot lays all these faults,—if faults they all are,—at vicious effects. President Eliot lays all these faults,—if faults they all are,—at the door of popular education. He should have presented these indictments by comparison and contrast with our past. We have drunkenness, all too much of it, but not one half, in proportion, of what society in this country and England had fifty or seventy-five years ago. Crime is not so prevalent, not so violent, and not so vicious as it was. The other conditions are not as bad as Mr. Eliot paints them. The chief flaw in his indictments of society, results from charging these conditions to popular education. He might as well charge them to the home, the church, the state, or the press. The public school, indeed the whole school system, from the district school to the university is only one of the factors in shaping the midds of school to the university, is only one of the factors in shaping the minds of school to the university, is only one of the factors in shaping the minds of men and women in this country. It is a factor frequently overestimated by men like President Eliot. The chief work of the public school, and one that the Harvard president ought not to have overlooked in his speech, is the unifying and assimilating power of American life. Without the public school, we would have half a dozen separate, perhaps hostile races with their respective languages and social customs. The public school has made America a nation, and only the public school could have done this. To be sure, American society has not shown the marked advance that some of the great ontimits of the early and middle part of the nineteenth some of the great optimists of the early and middle part of the nineteenth century predicted. It has no larger proportion of men of great intelligence than it had in the days of Washington and Webster. It has all too few men like President Eliot.



EDITORIAL ORISON SWETT MARDEN BDITOR AND FOUNDER

PAG THE SUCCESS COMPANY UNIVERSITY BUILDING, NEW YORK



The Salary You Do Not Find In Your Envelope

HAVE before me a letter from the manager of a large business college, so pertinent to the subject I have chosen for this "talk" that I here reproduce it, omitting names of persons and places:-

MY DEAR SIR:—The manager of one of the largest firms of P—, which employs seventeen of our graduates, recently applied to us for a young man. We telephoned him, and succeeded in having the position held open for one of our graduates. We at once wired the young man, asking him to come to see us about this matter; but, instead of acting upon our advice, he wrote us for further information in regard to the salary he might expect at first. Several weeks ago we had corresponded with him about the trial salary paid by this firm, and had told him that the manager never started a beginner at more than five dollars a week, but that that salary was paid only to find out if the person would be suitable for the work. Mr.—'s case is evidently that of a young man who spends most of his time figuring out the trial salary and the number of hours of daily work. The company referred to in our letter is one of the most prosperous business firms in P—, and has hundreds of persons on its pay roll.

What chance of success can there be for a young man who faces life with a pitiful haggling question as to how many dollars and cents he shall sell his services for during his apprenticeship? I have no sympathy with an employer who cuts the salaries of his employees down to the lowest possible figure, and who, while recognizing particular merit, instead of rewarding its in decrease merch to be sufficient to the lowest force. ing it as it deserves, meanly tries to monopolize the benefits accruing from it without any thought of compensation or approval. There are unfortunately many such men. But with a young man who, at the outset of his career, ruins all his prospects of future success and usefulness for the sake of a paltry dollar or two a week, I have even less sympathy, if that were possible.

A boy or a man who works simply for his salary, and is actuated by no higher motive, is dishonest, and the one whom he most defrauds is himself. He is cheating himself, in the quality of his daily work, of that which all

the after years, try as he may, can never give him back.

If I were allowed but one utterance on this subject, so vital to every young man starting on the journey of life, I would say: "Do n't think too much of the amount of salary your employer gives you at the start Think, rather, of the possible salary you can give yourself, in increasing your skill, in expanding your experience, in enlarging and ennobling yourself." A man's or a boy's work is material with which to build character and manhood. It is life's school for practical training of the faculties, stretching the mind, and strengthening and developing the intellect, not a mere mill for grinding out a salary of dollars and cents.

Your work, be it ever so humble or poorly paid, is your great opportunity to carve your life-statue from the rough marble given to you. The salary you receive, compared with the real value of your work to yourself, if it be done in the proper spirit, is as are the chips which fly from the sculptor's chisel to the angel which he calls out of the formless marble. Your week's endeavor is the calling out of the lines of grace and beauty in your life-statue. The money you receive in exchange for your services, at the beginning of your career, is but an incidental feature of a temporary arrangement. The opportunity to make yourself larger and nobler, more competent and skillful, is the main thing to be considered. You can draw from the faithfulness of your work, from the high purpose which animates you in its performance, a recompense so munificent that the sum your employer pays you will seem ridiculous beside it. You are working for him on gross material, but your real work, that which will tell now and through all the years to come, is upon,—yourself.

Under the old-world apprentice system, no matter how ambitious, how eager, or how competent a boy was, he could not advance till the full term of his long trade-bondage had ended, and then promotion to any high post

generally came with advanced age.

How different it is in this new world of opportunity, where a boy who is quick-witted, has a clean-cut mind, and uses his eyes and ears, can absorb in a comparatively short space of time a knowledge of business which it has taken his employer, perhaps, half of a long life to attain in the hard school of experience. What comparison can there be between a paltry salary and the training a youth receives in the life-school of a large business establishment? Where else can he learn such valuable lessons? Think of the thousands on thousands of dollars his employer expends in trying experiments that, after all, may fail. He has paid out many a large sum in learning his lessons, but the boy in his employ, if he is quick and observant, can master them all free of charge. Was there ever any school so valuable to him as this? Where else could he learn such lessons in economy, in foresight, in sagacity, in management, and in finance, -lessons which may save him from ruin when he shall start in business for himself? He is gaining knowledge all the time at his employer's expense,—knowledge which will be invaluable to him in after life.

One of the best parts of your salary, which you do not find in your envelope, is your opportunity to study human nature, and especially weaknesses, the peculiarities, the handicaps of your employer, which, perhaps, unknown to him, have kept him from a larger success. You have a chance to look into his life, and to know him as few people do, and, if you make a study of his success and failure qualities, you will be warned in time to avoid and profit by his failings. You cannot afford to be kept back by these hampering trifles, made plain to you by this life-study of your employer, which should lead you to self-scrutiny, and make you wiser and more successful than he. How small and narrow and really blind to his own interests must be the youth who can weigh a question of salary against all those privileges he receives in exchange for the very meager services he is able to render his employer.

Do not fear that your employer will not recognize your merit and advance you as rapidly as you deserve. If he is looking for efficient em-

ployees,—and what employer is not?—it will be to his own interest to do so,—just as soon as it is profitable. Touching this, W. Bourke Cockran, himself a remarkable example of success, says: "The man who brings to his occupation a loyal desire to do his best is certain to succeed. By doing the thing at hand surpassingly well, he shows that it would be profitable to employ him in some higher form of occupation, and, when there is profit in his promotion, he is pretty sure to secure it."

Do you think that kings of business like Andrew Carnegie, John Wanamaker, Robert C. Ogden, John A. McCall, Charles M. Schwab, and other lesser powers in the commercial world would have attained their present commanding success had they hesitated and haggled about a dollar or two of salary when they began their life-work? If they had, they would now probably be working on small salaries for other people. ary, but opportunity, that each wanted,—a chance to show what was in him, to absorb the secrets of the business. They were satisfied with a dollar or two apiece a week, hardly enough to live on, while they were learning the lessons that made them what they are to-day. No, the boys who rise in the world are not those who, at the start, split hairs about salaries.

Often we see bright boys who have worked, perhaps for years, on small salaries, suddenly jumping, as if by magic, into high and responsible positions. Why? Simply because, while their employers were paying them but a few dollars a week, they were paying themselves vastly more in the fine quality of their work, in the enthusiasm, determination, and high purpose they brought to their tasks, and in increased insight into business methods.

Colonel Robert C. Clowry, president of the Western Union Telegraph Company, by working six months for nothing as a messenger boy, and for experience and capability rather than salary in later days, fitted himself for present honors. Bismarck really founded the German Empire when working for small pay as secretary to the German legation in Russia, for there he secured a knowledge of statecraft and learned what Germany needed. worked so assiduously that his government prized his services more than those of the German ambassador. If he had earned only his salary, he might have remained a clerk, and Germany a tangle of petty states. History is made by men who work for results and self-development.

A millionaire merchant of New York told me the story of his rise. walked from my home in New England to New York," he said, "where I secured a place to sweep out a store for three dollars and a half a week. At the end of a year, I accepted an offer from the firm to remain for five years at a salary of seven dollars and a half a week. Long before this time had expired, however, I had a proposition from another large concern in New York to act as its foreign representative at a salary of three thousand dollars a year. I told the manager that I was then under contract, but that, when my time should be completed, I should be glad to talk with him in regard to his proposition." When his contract was nearly up, he was called into the office of the head of the house, and a new contract with him for a term of years at three thousand dollars a year was proposed. The young man told his employers that the manager of another house had offered him that amount, a year or more before, but that he did not accept it because he would n't break his contract. They told him they would think the matter over and see what they could do for him. Incredible as it may seem, they notified him, a little later, that they were prepared to enter into a ten-year contract with him at ten thousand dollars a year, I think it was, and the contract was closed. He told the writer that he and his wife lived on eight dollars a week in New York, during a large part of this time, and that, by saving and investments, they laid up \$117,000. At the end of his contract, he was taken into the firm as a partner, and became a millionaire.

Suppose that this boy had listened to his associates, who probably said to him, many times: "What a fool you are, George, to work here overtime to do the things which others neglect! Why should you stay here nights and help pack goods, and all that sort of thing, when it is not expected of you?" Would he then have risen above them, leaving them indeed miles of perpetual employees? No, but the boy who walked one hundred miles to New York to get a job saw in every opportunity a great occasion, for he could not tell when fate might be taking his measure for a larger place. The very first time he swept out the store, he felt within him the ability to become a great merchant, and he determined that he would be. He felt that the opportunity was the salary. The chance actually to do with his own hands the thing which he wanted to learn; to see the way in which princely merchants do business; to watch their methods; to absorb their processes; to make their secrets his own,—this was his salary, compared with which the three dollars and fifty cents looked contemptible. He therefore put himself into training, always looking out for the main chance. He never allowed anything of importance to escape his attention. he was not working, he was watching others, studying methods, and asking questions of everybody he came in contact with in the store, so eager was he to learn how everything was done. He told the writer that he did not go out of New York City for twelve years; that he preferred to study the store, and to absorb every bit of knowledge that he could, for he was bound some day to be a partner or to have a store of his own.

It is not difficult to see a proprietor in a boy who sweeps the store, if proprietorship is in him, by watching his work for a half-hour. By his manner you can often tell whether there is growth, expansion, enlargement, and ambition to give a strike and a st and ambition to rise, or a disposition to shirk, to do as little as possible, and never to do a thing which belongs to somebody else to do. boy who regards his opportunity above his salary, and works for the work's sake, who is marked for the high places of the future.

He Will Paint the President's Portrait Boyer

JOHN SINGER SARGENT, who has come to this country to paint a portrait of Theodore Roosevelt, and to place the last of his decorative panels in the Boston Library, has won the pre-eminent position which he holds among American artists by his consistent and undeviating adherence to what he conceives to be the true principles of his art. In the early years of his study, he formed his ideal, and through all his professional career he has kept it ever before him, steering his course without regard to wind or tide. He has disdained the aspersions of critics, pursuing his aim with vigor and directness, insisting upon the recogni-

tion which is now universally given his genius by the greatest critics in the world.

Mr. Sargent is a conspicuous type of the ideally successful painter. His course has been one of steady advancement. He has not been obliged to retrace his steps for an instant or to acknowledge an error. He has always been sure of his footing and has compelled approbation. Men who looked with scorn and bitter denunciation on some of his earlier creations, acknowledge them to be the work of a master. Lines and perspectives which seemed to indicate a crude and untaught hand are now conceded to be the embodiment of pure art.
In short, Sargent has refused to be told

how he should paint. Noted artists said to him frankly and blandly that his was not real painting. "What you are doing is contrary to all accepted teachings," said one; "your ideas of art are utterly wrong." But the young student kept on with a persistence that must have seemed a contemptuous obstinacy in one of his years, and he never permitted himself to take a backward step. He was called "crazy" and "spiteful." His ideas have been justified in the completest sense. The result is the reward of a man who pursues his line of work to its logical end.

He Clung tenaciously to His Own Ideals

Sargent is benefited by the muses. Every environment of his youth was in his favor. Born of an influential American family, in 1856, in Florence, Italy, whither his father had retired after a successful medical career in Philadelphia, he grew up in the midst of all the noted features which that historic city on the Arno can offer to charm the senses and influence the spirit. His artist's soul was stirred daily, and his genius was in-

spired by every sight and sound. He could not help becoming a painter, and a great one. The noble works of Titian and Tintoretto in the Uffizi Gallery exerted an influence that was lasting, and

the charm of Botticelli never left him. In 1875, Sargent left the schools of Italy and Germany for a special training in the art schools of Paris. Before then, he had done some work of merit, and, when he knocked one day at the door of Carolus-Duran's studio in the Boulevard Montparnasse, the portfolio of drawings under his arm showed that he was an artist of ability. He was a quiet, reflective youth, and, though still a student, had his course already planned. He took his place in the studio with the purpose of devoting himself wholly to learning all that his master could teach him. He showed no impatience, and attempted no original work. studies and sketches which he produced during the years he spent with Carolus-Duran were entirely embodiments of the artist's teachings. Sargent was a model pupil, obedient and nonassertive, and, as the result of his study, he absorbed thoroughly the principles of the best Parisian art. He mastered the mechanical side of painting, became well grounded in system, and learned how to bring out the best effects with a dash and dexterity characteristic of the French masters. Yet he was by no means an



JOHN SINGER SARGENT

imitator. A steady intent to observe all, study what was good, absorb what was best, and consistently to form his own opinion and his own style, lay at the bottom of his nature. The marvelous power of insight and analysis which has given such strength and character to his later portraits, enabled him to combine with his study an independence of judgment which brought him immediate recognition when he exhibited a portrait of his preceptor. This piece of student work gave the young man, then barely twenty-three years of age, a position in the art world of

The vigor and vivacity he had acquired by his years

of study in Paris were to be supplemented by the dignity and subtle grandeur of the Spanish school. Madrid, the once grand imperial city, still held among her charms the master-pieces of Velasquez, and Sargent became an ardent devotee of the canvases of the great Spaniard which were hung in the Prado. He was prepared for the final development of his The grace and refinement of Old Spain shed over his work the soft sheen of elegance which was the consummating element of his power. The dash and skill of the French, the taste and charm of the Italian, and the dignity of the Spanish, all blended into a perfected conscious power, which needed only his virile American spirit to place him in the forefront among contemporary artists.

His Methods finally Won Due Distinction

He was then twenty-six years old. In 1882, he returned to Paris to astound the Parisian populace with the vivid realism of his "El Jaleo." This picture was the sensation of the season. It was his first great technical triumph, and set forth the principles that he had been told to lay aside, but which he had adopted and by which he was to be guided. When he moved his studio from his modest quarters on the Rue Notre Dame des Champs to a larger establishment on the Boulevard Berthier, the eyes of all Paris followed him. There he painted a picture of children which has commonly been called the "Hall of Four Children." This picture was, in a sense, to make his fortune. Its disregard of conventional attitudes and its brilliant distinction of lighting made its creator more than ever before a subject of public interest.

Indeed, Sargent had been followed by the public gaze from the time of his leaving Carolus-Duran's studio. He had leaped, at one bound, to a position which hundreds of his older and less brilliant conten.poraries were toiling arduously to attain. He was recognized as a powerful champion of a style of painting which contravened many of the artistic traditions, but which was, nevertheless, of a striking and virile quality that commanded attention. Critics divided on his work, and controversy raged about him as a pivotal point.

The Art World Was Staggered by His Bold Defiance

Many writers were bitter in their fault-finding. and accused him of brutality of treatment and roughness of execution. But he defied them all boldly and threw down the gauntlet to the whole art world, until their very criticism became a kind of admiration, and even in finding fault they approved. Sargent said, calmly, "I am right."

The open rupture came with the exhibition of his wonderful "Madame Gautreau" portrait, which set all Paris in excitement by its audacity and novelty of treatment. picture was a shock to Parisian ideals. Its treatment of drapery and expression astounded the people. His patrons demanded a modification, but he refused to make a single concession or change a single line.

"There is no compromise," he declared, "possible in art. It must be built on realism. If I had painted as I was told to, and not as I felt, I should have been a failure.

This hostile attitude of the French people was finally influential in his determination to make England his future home. He had considered this move for some time, and the Gautreau episode hastened his decision to transfer his residence to a more appreciative country. His reception by the English public was friendly, and his posi-tion was at once made secure. In 1894, he was made an associate of the Royal Academy, and was elected to full membership in 1897. Since that time he has lived almost continuously in London.

Sargent Exhibited One Year in the Royal Acadamy

In 1899, a notable exhibition of Sargent's work was held in Boston. In the Museum was hung, in a splendid, commanding position, the great realistic creation of his early career, "El Jaleo." In the Public Library was to be seen the scheme of the fine panel decorations upon which he has been at work for several years, while a collection picture, with its big canvas and fine background, was his most complete and finished production.

The year 1901, at the Royal Academy, has been described as distinctly a Sargent year. His pictures held the place of honor, and the crowds that constantly stood before them attested the admiration with which they were regarded. His "Crucifix" was an embodiment of brilliant ideas, and a work of great inspiration. His work that year has been characterized as "a bright spot upon the

dull materialism of the art of to-day."

Sargent shares with Whistler a place among the very few distinctly notable painters of the present day. He will always be ranked as among the most conspicuous of his artistic contemporaries. He has forced himself to this commanding position by his fidelity to artistic principles, accepting no debased ideals and permitting no compromise. His position has been that of a standard bearer about whom two hostile camps of critics have been divided. That he never, for a single instant, allowed that standard to droop, is the meaning of the fame that is his.

He Is Acknowledged to Be a Master of Technique

He is the living exponent of the great technical ideals of painting. Every art is, at bottom, a science. Real results cannot be obtained by haphazard methods. The most delicate shading and coloring, the most careless-seeming lines that give life and grace to a scene, owe their genesis to the scientific analysis of the picture which already exists in the artist's mind. So the variation of a single one of these elements from its place mars the harmony of the work. Every great subject has but one logical climax, which cannot be changed in any manner without ruining the whole. That this ideal is not always in accord with the ideals of the commercial world has proved the downfall of many a painter with too little strength of will and resource to maintain his position. man must paint what the people want, ' is the plea; and so he must if he is seeking merely pecuniary rewards. If he is devoted to art in its true sense, he cannot afford, for the sake of commercial interest, to alter a single feature that would impair the perfection of his work. Sargent is great through his ability to maintain this elevated position. Had he compromised, his power would have declined.

The Gautreau affair showed his strength. ordered to paint a portrait of Madame Gautreau, one of the leading young matrons of the French capital, he executed his commission with a fidelity and frankness of treatment that were the ideal of

realistic presentation. The harmonious development of the picture required a certain free use of drapery which was displeasing to his patrons. They demanded a change in this detail, and threatened to leave the picture on his hands. Sargent refused to alter a stroke. "There is no change to be made," he said. "There can be none. Any other treatment would not be lart." So, with a proud dis-







dain, he placed the portrait in his own private collection, and paid no heed to the war of opinions which began to center with increasing bitterness about him.

To-day, Sargent holds an established place as more original, and more efficiently equipped than any of his compatriots. He is a modern of moderns. He combines in his nature the most productive elements of both continents. In him are united the keen perception and quick intuition of the new world with the taste and elegance and long-established ideals of the old. His youth, spent among the storied walks and color-embowered gardens of Florence, his early life in the studios of Paris and the galleries of Madrid, filled his nature with a sense of the quiet harmony and simple elegance gave acuteness and virility to his methods. In his work, we see his Americanism in the brilliancy of his effects, and the audacity with which he undertakes a difficult or seemingly impossible task. His nature is American; his methods are European. in the latter he is said to have received the mantle of Velasquez. He has sought, by thoroughness and in too much haste to wait. In his "Lady Elcho, Mrs. Arden, and Mrs. Tennant," and in "Mrs. Meyer and Her Children," are seen the full real-

of continental ideals, and his American birthright study, the perfection for which most Americans are ization of the grandiose and the elegant teachings of his Spanish master.



If You Can't Go to College II.—Mathematics

EUGENE LAMB RICHARDS

[Professor of Mathematics, Yale University]

[This is the second of the Success series for those who cannot go to college. It is intended to give an independent student a carefully planned programme of college studies. This unique and important series has been secured from eminent educators, representing the highest thought of the greatest American institutions. It is not a college course at home, but a home course that gives as nearly as possible an equivalent in discipline of what a college graduate secures. The third paper will be on "Political Economy," by Professor Richard T. Ely, of the University of Wisconsin. The other papers will follow, from month to month, until all departments of knowledge shall have been treated.—The Editor.]

THE amount of mathematics studied in the college course leading to the degree of oachelor of arts is varied according to the purpose of the student. A certain quantity is required, but that quantity also varies in the different colleges. A knowledge of algebra, geometry,—both plane and solid,—plane trigonometry and logarithms, elementary mechanics, and elementary analytical geometry is generally required, without regard to the student's option. If he wishes to be prepared to study advanced mathematics, or higher physics, to the studies named is added a course in the differential and integral calculus. If, therefore, a young man wishes to pursue, outside of a col-lege, a course of mathematical study sufficient to enable him to undertake the study of higher mathematics, or make investigations requiring the aid of mathematics, he ought to ground himself well in algebra, geometry, both synthetic and analytic, trigonometry, mechanics, and calculus. In algebra, in addition to the ordinary transformations, he should be familiar with the subjects of radicals and series. Expansion of a quantity into series and the summation of series are particularly important. In geometry, I should advise a beginner to study the first book of Euclid, -Todhunter's edition, - and to work as many of the exercises in the back of the book as he can without spending too much time on them. This he would better do, using dividers and ruler to make the constructions as exact as possible, as a preparation for the study of one of the modern text-books. In this way he will acquire a mastery of a logical method not to be found in any other book. After this discipline a student will not be satisfied with anything short of clear and definite ideas of space relations, or with any method but the best, both very desirable mental equipments with which to start a course of mathematical study. After algebra and geometry should come logarithms and trigonometry, -- plane trigonometry as an essential, -and, to make a thorough course, spherical trigonometry. Then analytical or coordinate geometry, mechanics, and calculus should follow, in the order named.

It Is Necessary to Memorize Several Formulas

Let us consider the case of a young man who wishes to take the course of mathematics for the degree of bachelor of arts, and who, at the same time, can neither afford to enter a college nor to hire an instructor. How shall he go to work? In the first place, we shall assume that he knows arithmetic. If he does not, let him get a first-class book and make himself thoroughly acquainted with the ordinary operations of the subject, paying particular attention to decimals. Next, let him take one of the text-books on algebra which I have mentioned, and go through with that, working examples which illustrate the text, but not spending too much time

on examples which are merely puzzles. What he needs is a working knowledge of the subject for further progress. In studying the text it is well not to lay too much stress on formulas. Some formulas are necessary and should be memorized, as, for instance, those for the sum of arithmetical and geometrical series, and for the expansion by the binomial theorem with any exponent. But many formulas are nothing more than the solutions of general examples. The method of deriving such formulas is more important than the formulas themselves. That method a student should aim to acquire, so that, shutting up the text-book, he may be able to reproduce it himself. If he does this, and, at any time, forgets a necessary formula, he is master of a method which will give him what he wants, even if his memory fails him.

Euclid's Method Is a Satisfactor One for a Beginner

If a student has a limited amount of time, and can only give, say, three hours a day to a subject, it would be impossible for him to take up geometry at the same time that he is pursuing algebra. There is an advantage in studying both subjects at The change from one study to another is helpful, as all variety in work is. But, if he can study only one subject at a time, algebra should come before geometry. It naturally follows arith-metic, and in some of its topics it is a general arithmetic.

What I have said about method in algebra, applies with even more force to the study of geometry. Some men attempt to memorize the demonstrations of propositions. That is a fatal mistake. Though geometry is a hypothetical science, yet as all the quantities considered—lines, surface, solids and angles,—are represented in diagrams, the relations must be seen to be understood. It is this fact which makes the exact construction of figures so important. Euclid's method, in this respect, has always commended itself to me as so much better, for a beginner, than that of the modern text books If he uses a construction in the demonstration of a proposition, he has already given a student in-structions how to make it. Most of the modern books are guilty of the fallacy of reasoning in a circle. They assume a construction to demonstrate a principle, and, having proved the principle by the construction, they then apply the principle to make the construction. Euclid chose the natural and logical method,—one step at a time; nothing, after axioms and postulates, taken for granted; a proof given and an authority cited for every asser-In beginning the study, therefore, it is wise for a student to go through the first book of Euclid, as I have advised before.

When a student comes to trigonometry, let him pursue a plan similar to the one recommended in geometry. If a diagram is to be drawn for an example requiring solution, let him draw the figure

with as near an approach to exactness as possible. By using a good protractor, angles can easily be made to the nearest quarter of a degree, and by means of a plane scale and needle-point dividers, lines can be plotted to the nearest hundredth of the selected unit of representation. If this be done, the example can be solved, approximately, by measurement as well as by calculation, and such a solution will serve as a check on absurd results due to mistakes in the use of tables.

In spherical trigonometry, as in solid geometry, much help can be obtained by the use of the globe with graduated ring. I have prepared a manual for the use of such a globe of three-inch diameter. Both globe and manual can be obtained from the Yale Cooperative Association, of New Haven, Connecticut. If a student desires to go into practical astronomy, this globe work is of great assistance in making the terms of the science familiar. Problems of sunrise and sunset can be approximately

solved by these globes.

The amount of time required for the course here outlined will vary with each individual, according to his personal ability and the thoroughness of his previous preparation for the work. To be admitted to college the student is generally required to be prepared in arithmetic, including the metric system, algebra, logarithms, and plane geometry. After entering, for two academic years of about thirtythree weeks each, he is required to attend classroom exercises in mathematics amounting on the average to three hours a week. If three hours more for preparation are added, the amount of time devoted to the course by the average student would probably be increased to six hours a week.

Some of These Books Will Help a Home Student

There is such a great number of text-books on the market that it is impossible to make a single choice which would satisfy the ideas of every instructor. Of algebras I would mention Loomis's and Wentworth's. Phillips and Fisher's work on geometry is one of the best of the modern text-books. Phillips and Strong's "Trigonometry," -plane and spherical,—with logarithms, would naturally follow Phillips and Fisher's "Geom-Some students might prefer the geometric to the analytic method in developing the subject. Richards's "Trigonometry with Applications to Mensuration, Surveying, and Navigation" was written to supply this need. Loomis's or Wentworth's "Analytical Geometry" would be a good book for a young man studying by himself. such a student I know no better work in mechanics than Dana's. A very complete short calculus, differential and integral, is Osborne's.

I recommend the student to pay particular attention to the definitions in each subject. In every good text-book the definitions contain the fundamental concepts on which the superstructure is built. It is, therefore, of the utmost importance to gain a clear idea of the meaning of the definitions.

To make the principles of mathematics clear and practical, a number of examples under each subject will have to be worked. I advise a student to work as many as possible, but not to spend time upon them beyond what is necessary to understand and illustrate the text. A very good plan is, on the advance, to work problems that are easy, and then, on the review, when the principles are more familiar, those which seemed difficult on the first trial.

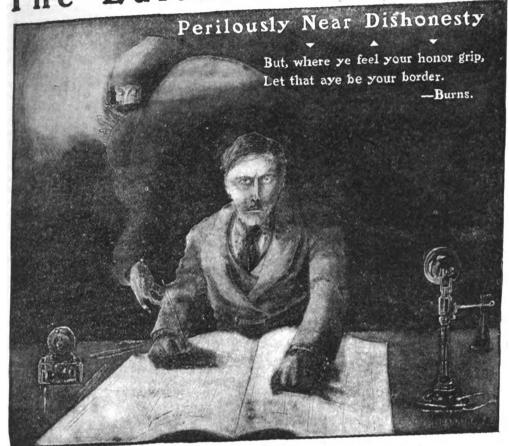
If a young man, studying without the aid of an instructor, begins to find a subject involved in almost hopeless difficulty, let him immediately commence a review from the very beginning. By the time he reaches the place where he turned back, if he has made a faithful review, he will find that his difficulties have vanished.

A Small Mathematical Library Will Be of Service

If a student can afford a small mathematical library, he will find considerable help in overcoming obstacles if he consults more than one text-book on a subject. Todhurter's series of Mathematics, "Algebra," "Trigonometry, both Plane and Spherical," "Conic Sections," "Differential and Integral Calculus," would form a good nucleus for such a library. A treatise on algebra by Charles Smith, and Williamson's "Differential and Integral Calculus" are good works for reference. These books are all issued by the Macmillan Company, New York City. Olney's "Geometry" and Chauvenet's "Complete Geometry" might be added to the list.

Let no man be discouraged by difficulties. They will disappear, with increasing knowledge. As the student advances, each new acquisition will throw light on the dark places of the first studies.

Chat With His Readers JANUARY, 1903 Editor's The



Only Executed Intentions Count

THE paving of the road to a very uncomfortable place is said to be composed of good intentions. Nowhere else has this material been tried for paving, though it is plentiful enough to use for almost any purpose. We all know people whose houses burn when they are "just going to" insure; who lose a cow or a horse when they are "just going to" mend the fence or close the gate; who are "just going to" buy stock, when it goes up like a rocket; who are "just going to" pay a note, when it goes to protest; who are "just going to" help a neighbor, when he dies; who are "just going to" send some flowers to a sick friend, when it proves too late: in fact, they are "just going to" do things

all their lives, but never get them started.

"To be always intending to live, but never to find time to set about it," says Tillotson, "is as if a man should put off eating and drinking until he is starved to death."

Under every clock in a factory at Cleveland, Ohio, is the motto, "Do it now!" Such a motto, lived up to by everyone, would spare the world much trouble. It would add thousands of good deeds to daily happenings, save many firms from bankruptcy through bad debts, paint hundreds of pictures only dreamed of, write books without number, and straighten out half the tangles of our complicated social life. The habit of putting off disagreeable duties is responsible for much needless unhappiness, for these bugbears weigh on the mind and prevent the satisfied content that comes from duty well performed. Most tasks promptly undertaken prove less difficult than we anticipated, and the joy of accomplishment often compensates for any hardship experienced.

Don't get to be known for unfulfilled good intentions. Good intentions carried out become the good deeds that make men useful, loved, and famous. Doing things, rather than just planning them, makes all the difference between success

and failure.

Think of your own faults the first part of the night, when you are awake, and of the faults of others the latter part of the night, when you are asleep.—CHINESE PROVERB.

Signs of Depleted Energy

IF you are disposed to find fault, to grumble at everything about you; if little things irritate you; if trifles upset you; if you go to pieces, so to speak, when anything goes wrong in your business, you may be pretty sure that there is some enemy at work in your system, that your energy is being exhausted in some way, and that your vitality is at a low ebb.

other matter. Whatever the cause, you must find and remove it, or allow it to wreck your life. You cannot do good work if the nervous system is shattered. If the nerve centers are systematically robbed of nourishment or demoralized by mental or physical dissipation, the whole machinery of body and mind is thrown out of order. No defective machine can turn out good work, and the longer one tries to use it, while some serious obstacle is clogging the wheels, the greater will be the damage it suffers, and the more diffi-

cult to put it in proper repair. "Despair and postponement are cowardice and defeat. Men are born to succeed, not to fail."

been smoking too many cigarettes or cigars. Few

been smoking too many cigarettes or cigars. Few things exhaust energy or lower vitality so rapidly as excessive smoking. Perhaps you are burning both ends of your candle, sitting up late at night, going to parties or theaters every evening, and trying to keep up with your work or your studies during the day, handicapped by loss of sleep and consequent dullness or inertia.

If you feel irritable and out of sorts on getting up

If you feel irritable and out of sorts, on getting up

in the morning, and are disposed to be fractious and

fretful all day, there can be no doubt that there is something seriously wrong in your system. The

bad effects may proceed from some mental disturbance. It may be worry or excessive anxiety about your business, your family affairs, or some

Trying to Be Somebody Else

ONE of the greatest enemies of contentment and real happiness is a habit of comparing ourselves with others,—comparing financial conditions, possibilities, homes, environments.

It is a strong man who dares to be himself, who does not envy others, and who can see his neighbors grow prosperous while he only makes a good living. This constant comparing unsettles character, and makes one dissatisfied with his lot.

One of the greatest triumphs for an ambitious young man is to learn to be contented, to be satisfied with doing a good honest day's work: to be contented to live humbly, if necessary, while his neighbors roll in wealth.

A burning desire to fill a high place, to do some-

thing unusual to attract public attention, to do that which must be accomplished with tremendous strain and stress of the faculties,—a straining after effect,—this morbid ambition is one of the curses of the age.

No one can live a true life who measures its worth by what others do, or think, or say. Be content to be yourself, to be self-contained. Contentment, after doing one's level best, brings a poise and sweetness into the life, a balance to the character, which can never develop under festering, over-anxious, abnormal ambition.

The man who is always trimming his sails,backing and apologizing because he has not been able to do this or that, who is not content to be himself, who is always trying to be somebody else, will never develop a strong character.

The world admires a man of balance, one who is equipoised, who is self-sufficient, who believes in himself, trusts himself, who does not cower, whine, or apologize, but stands erect and dares

to live his own creed.

The world instinctively hates the trimmer, the man who fawns, the man of "ifs" and "buts." It likes a straight, clean-cut article, without mixture or amalgamation.

"What humanity wants most is not money, but sympathy, comprehension, enlightenment, uplifting."

Unfinished People

THERE are a great many people who do remarkable things in one direction, yet seem to be incomplete, or totally unfinished in others. At a distance, they shine like geniuses, but on closer acquaintance we discover some conspicuous lack, some striking defect which mars their personalities and their careers.

People of this kind are often looked up to as reopie of this kind are often looked up to as superior beings, or envied as geniuses by average men and women. Yet is it not, on the whole, infinitely better to have a complete, well-rounded character, even if not brilliant or striking in any particular, than to have overtowering ability in one line and not average well?

The average boy gifted with good, sound common sense, with a willingness to work, with an mon sense, with a willingness to work, with an ambition to be somebody in the world and a determination to make the most of his opportunities, even though he shows no glint of brilliancy, everything considered, will win much more satisfactorized and wing success then many as a called factory and enduring success than many a so-called

"Right is neither male nor female, knows nothing about sex, and is one and the same thing in man and in woman."

The Best Gift You Can Make

THE mind that lies sunny to the world, that radiates light and scatters darkness, is of more value to civilization than a dozen selfish, sordid millionaires. A beautiful, generous, sweet characteristics with the control of the control ter like Whittier's, Longfellow's, or Florence Night-ingale's, enriches a whole community,—yea, a whole nation, or the entire world,—and there are no other real riches. This is the wealth that dwarfs every other.

Everybody loves an open, transparent, generous mind, because he knows that it harbors no shadows,—nothing mean, small, or worthless,—no envy or jealousy. We know that friendships with it are safe, and that secrets are sacred to it. The larger and nobler such characters are, the more universally beloved they are, because they embody our ideals. Such characters are enno-bling and inspiring in their influence on others by teaching them to despise the paltry meanness, narrowness, and petty vices of their own nature, which are impossible to broad, magnanimous minds. No small part of the love inspired by such beautiful souls comes from their attitude of mind toward others, and the generous, helpful thoughts they continuously hold. Such a thought-habit enlarges the life, mellows experience, harmonizes the faculties, and promotes health and clear thought; but, more than that, it acts on all the minds that come within its influence. The thoughts we hold toward those about us will help or hinder them, and will make them larger and nobler or meaner and more abject. We are beginning to see that money-giving is not the greatest charity, by any means. The giving of noble, gencharity, by any means. The giving of noble, generous, magnanimous thoughts, or the holding of a kindly, helpful, inspiring mental attitude, may be findly, nelpiul, inspiring mental attitude, may be of infinitely more value to those about us than merely helping them with a little money. Remember that there is no other gift in the world like the giving of yourself, if given royally, largely, generously, and not stingily or meanly. You can sende no greater service than by giving your best render no greater service than by giving your best thought, your larger and nobler self. This is an everlasting benediction, and in this way you can make yourself a perpetual delight to the world. Compared with the giving of your higher self-your money-giving will look despicable.

John Ruskin's Selected List of Books - William Stead, Jr.

"TRUE books," says John Ruskin, in "Sesame and Lilies," "have been written in all ages by their greatest men, by great leaders, by great statesmen and great thinkers. They are all at your choice and life is short. This illimitable choice and the limited amount of leisure in which to exercise it is the perplexing problem that confronts every intelligent reader to whom reading is something more than a form of recreation. How can he hope to master the best literature of the world, to make himself familiar with the true books of every age in the small amount of time he is able to devote to systematic reading? Many attempts have been made to give a satisfactory answer to that question since Carlyle first lectured on the subject at Edinburgh. One of the most painstaking and thoughtful was the list of a hundred best books drawn up by Lord Avebury, better known as Sir John Lubbock, a decade and a half ago.

His Censure Was not Confined to Any Class of Books

Many eminent men of letters, scholars, and booklovers assisted in the compilation of this list. While the discussion excited by that endeavor to select the best product of the minds of all ages was still at its height, a disciple of Mr. Ruskin sent the list to him in his beautiful retreat on the shores of the Lake of Coniston. It was speedily returned corrected in most characteristic fashion, some books struck out with a light movement of the pen, others obliterated beneath a flood of ink. "Putting my pen lightly through the needless, and blottesquely through the rubbish and poison of Sir John's list," wrote the great master of English prose, "I leave enough for a life's liberal reading, and choice for any true worker's loyal reading."

life's liberal reading, and choice for any true worker's loyal reading."

On glancing at the reproduction of this "blottesquely" amended list, a reader will see that Mr. Ruskin's censure was not confined to any particular class of books. The needless volumes which, in his opinion, were unworthy of inclusion in any list of the hundred best books, include Southey and Longfellow among poets, Froude, Macaulay, and Emerson among essayists, and Thackeray, George Eliot, and Bulwer among the writers of fiction. The "poisonous" works were principally found in the departments of history and philosophy. Gibbon's "Decline and Fall of the Roman Empire," Voltaire's histories, and Hume's "England" were stricken out with a vigorous pen. Grote's "History of Greece" vanished beneath a blot of ink, so great was Mr. Ruskin's disapprobation of that historian's masterpiece. He would not tolerate the claims of John Stuart Mill, Darwin, or

Locke. Mr. Ruskin's commendations are not less characteristic. He recommends his disciples to read all the works of Plato, Carlyle, and Scott. Mr. Ruskin, as is well known, shared Mr. Gladstone's enthusiastic admiration of the great Scottish novelist. "I should add," he wrote, at the same time, "one vital and essential book, —Livy, (the two first books,) and three plays of Aristophanes,—'Clouds,' Birds,' and 'Plutus.' Of travels I read myself all the old tomes I can get hold of; of modern, Humboldt is the central model. Forbes (James Forbes in 'Alps,') is essential to the modern Swiss tourist of sense.''

The Venom of a Bad Book Is deadly

But Ruskin did not confine his advice to simple negation expressed in ink blots. In another letter on the same subject, he did not hesitate to justify his condemnations and at the same time to express his views on the broader question of books and their readers. Referring to the attempt to provide such lists as that drawn up by Sir John Lubbock, Mr. Ruskin wrote:—

"It does not seem to enter into the respondent minds to ask whom or what the book is to be good for,—young people or old, sick or strong, innocent or worldly,—to make the giddy scoor, or the grave gay. Chief of all, they do not distinguish between books for a laborer and books for a schoolman; and the idea that any well-conducted mortal life could find leisure enough to read a hundred books would have kept me wholly silent on this matter, but that I was fain to strike out, for

[An unpublished letter by the great artist]



JOHN RUSKIN



my own pupils' sake, the books I would forbid them to be plagued with.

"For of all the plagues that afflict mortality the venom of a bad book to weak people, and the charms of a foolish one to simple people, are without question the deadliest; and they are so far from being redeemed by the too imperfect work of the best writers that I never could wish to see a child taught to read at all, unless the other conditions of its education were alike gentle and judicious.

"To put the matter into anything like tractable order at all, you must first separate the scholar from the public. A well-trained gentleman should, of course, know the literature of his own country, and half a dozen classics thoroughly, glancing at what else he likes; but, unless he wishes to travel or to receive strangers, there is no need of his troubling himself with the languages or literature of modern Europe. I know French pretty well myself. I never recollect the gender of anything, and don't know more than the present indicative of any verb, but with a dictionary I can read a

novel,—and the result is my wasting a great deal of time over Scribe, Dumas, and Gaboriau, and becoming a weaker and more foolish person in all manner of ways therefore. French scientific books are, however, out and out the best in the world; and, of course, if a man is to be scientific, he should know both French and Italian. The best German books should at once be translated into French, for the world's sake, by the French Academy. Mr. Lowell is altogether right in pointing out that nobody with respect for his eyesight can read them in the original.

"I have no doubt there is a great deal of literature in the East, in which people who live in the East or travel there may be rightly interested. I have read three or four pages of the translation of the Koran, and never want to read any more; the 'Arabian Nights' many times over, and much wish now I had been better employed.

To Read a Book fast Is an Unpardonable Folly

"As for advice to scholars in general, I do not see how any modest scholar could venture to advise another. Every man has his own field, and can only by his own sense discover what is good for him in it. I will venture, however, to protest somewhat sharply against the permission to read any book fast. To do anything fast—that is to say, at a greater rate than that at which it can be done well,—is a folly; but, of all follies, reading fast is the least excusable. You miss the point of a book by doing so, and misunderstand the rest.

"Leaving the scholar to his discretion and turning to the public, they fall at first into the broad classes of workers and idlers. The whole body of modern circulating library literature is produced for the families so daintily pictured in 'Punch,'—mamma lying on the sofa so daintily showing her feet, and the children delightfully teasing the governess, and nurse and maid and footman, the close of the day consisting of a state dinner and reception. And Sir John recommends this kind of people to read Homer, Dante, and Epictetus! Surely the most beneficent and innocent of all books yet produced for them is the 'Book of Nonsense,' with its corollary carols,—inimitable and refreshing and perfect in rhythm. I really don't know any author to whom I am half so grateful for my idle self as Edward Lear. I shall put him first of my hundred authors.

"Then there used to be Andersen! but he has been minced up, and washed up, and squeezed up, and rolled out, till one knows him no more. But a pure edition of him gayly illustrated would be a treasure anywhere,—perhaps even to the workers whom it is hard to please.

"I did not begin this criticism to recommend anything, but to answer questions why I effaced such and such books from Sir John's list.

"I.—Grote's 'History of Greece.'— Because there is probably no commercial establishment, between Charing Cross and the Bank, whose head clerk could not write a better one, if he had the vanity to waste his time on it.

"2.—Confessions of St. Augustine.—Because religious people nearly always think too much about themselves; and there are many saints whom it is much more desirable to know,—the history of St. Patrick, to begin with,—especially in modern times.

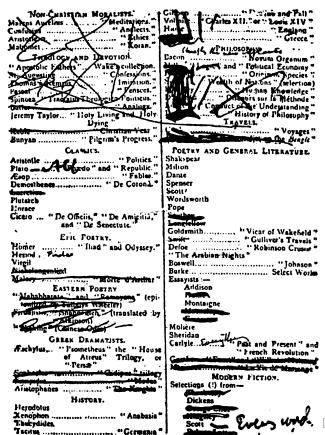
Some of Mr. Ruskin's Caustic Criticisms

"3.—John Stuart Mill.—Sir John Lubbock ought to have known that his day is over.

"4.—Charles Kingsley.—Because his sentiment is false and his tragedy frightful. People who buy cheap clothes are not punished in real life by catching fevers; social inequalities are not to be redressed by tailors falling in love with bishops' daughters, or gamekeepers with squires'; and the story of Hypatia is the most ghastly in Christian tradition, and should forever have been left in silence.

"5.— Darwin. — Because it is every man's duty to know what he is, and not to think of the embryo he was, nor the skeleton that he should be. Because, too, Darwin has a mortal fascination for all vainly curious and idly speculative persons, and has collected in the train of him every impudent imbecility in Europe, like

A facsimile page as marked by John Profile



a dim comet wagging its useless tail of phos-

phorescent nothing across the steadfast stars.

"6.—Gibbon.—Primarily none but the malignant and the weak study the decline and fall of either state or organism.

Dissolution and putreseither state or organism. Dissolution and putres-cence are alike common and unclean in all things; any wretch or simpleton may observe for himself, and experience in himself the process of ruin; but good men study, and wise men describe, only the

good men study, and wise men describe, only the growth and standing of things,—not their decay.

"For the rest, Gibbon's is the worst English that was ever written by an educated Englishman. Having no imagination, and little logic, he is alike incapable either of picturesqueness or wit; his epithets are malicious without point, sonorous without weight, and have no office but to make a

flat sentence turgid.

"7.—Voltaire.—His work is, in comparison with good literature, what nitric acid is to wine, and sulphuretted hydrogen to air. Literary chemists cannot but take account of the sting and stench of him, but he has no place in the library of a thoughtful scholar. Every man of sense knows more of the world than Voltaire can tell him; and what he wishes to express of such knowledge he will say without a snarl.

will say without a snari.

"I cannot here enter into another very grave and wide question respecting the literature for the young, but will only point out one total want in the present confused supply of it—that of intelligible books on natural history. I chanced, at breakfast the other day, to wish I knew something of the historyphy of a shrippy the rother that I of the biography of a shrimp, the rather that I was under the impression that I had seen jumping shrimps on a sandy shore express great satisfaction in their life.

"My shelves are loaded with books on natural history, but I could find nothing about shrimps excepting that they swim in the water and lie upon the sand in shoals, and are taken in multitudes for the table."

WORK OUT YOUR IDEAL

"THE situation that has not its duty, its ideal," "The situation that has not its duty, its ideal," says Carlyle, "was never yet occupied by man. Yes, here, in this poor, miserable, hampered, despicable actual, wherein thou even now standest, here or nowhere is thy ideal; work it out therefrom, and, working, believe, live, be free. Fool! the ideal is in thyself."

Not on some far-off height, in some distant scene, or fabled land, where longing without en-

scene, or fabled land, where longing without endeavor is magically satisfied, will we carve out the

ideal that haunts our souls.

In the humble valley, on the boundless prairie, on the farm, on sea or on land, in workshop, store, or office, wherever there is honest work for the hand and brain of man to do,—within the circumscribed limits of our daily duties is the field wherein our ideal must be wrought.

Wrapped up in every human being there are energies which, if unfolded, concentrated, and given proper direction, will develop the ideal.

Our very longings are creative principles, indicative of potencies equal to the task of actual achievement. These latent potencies are not given to mock us. There are no sealed orders wrapped within the brain without the accompanying ability to execute them.

If the emancipation proclamation is written in your blood, if it is indicated in the very texture of your being, you will have within you-undeveloped, it may be, but always there,—strength to break the fetters that bind you, power to triumph over the environment which hampers you.

No external means alone, however, will accomplish this. You must lay hold of eternal principles, of the everlasting verities, or you never can accomplish what you were sent into the world to do. You never can reach the goal of your highest possibilities until you believe in your Godgiven power to do so, until you are convinced that you are master of your will, and that the Creator has endowed you with strength to bend circumstances.

stances to aid you in the realization of your vision. Our energies must not be allowed to run to waste our energies must not be allowed to rull to waste in longing without action. Our latent strength must be developed steadily and persistently. All our reserves must be utilized, all our powers concentated and wisely directed toward the accomplishment of the work we have marked out for ourselves.

ment of the work we have marked out for ourselves. With eyes ever fixed on the ideal, we must work with heart and hand and brain; with a faith that never grows dim, with a resolution that never wavers, with a patience that is akin to genius, we must persevere unto the end; for, as we advance, must persevere unto the end; for, as we advance, our ideal as steadily moves upward.



"Hit that where it sounds best," said the man with the banjo

SYNOPSIS OF PRECEDING CHAPTERS

[Hiram Bennet and William Truman invest in a block of goldmine stock. Truman dies, and his shares of stock comprise his
estate, of which Bennet is the sole executor. Induced by the reports of so-called experts to believe that the mine is to prove rich
in paying ore, Bennet aids in the care of Truman's widow and
three children, and pays assessments on the stock until they become so frequent that he is embarrassed in trying to maintain his
own business through a dull period. When compelled to curtail
expenses, he tells his son, Holton, that he cannot assist him further in college. This proves gratifying news to the son, a robust
youth, who, at his father's suggestion, is only too glad to assume
the role of a secret-service agent in learning the truth about the
gold mine, a mission for which he fortunately is somewhat prepared by his studies in college. On arriving at the mining settlement, he lodges at "Brockey Cullen's Hotel," and makes known
his wish to go to work at the mine. In "Brockey" and Tommy
Darrow he finds good friends to assist him, and secures a job
as tool-carrier. The day that Holton begins work, his experience
in athletics at college proves as profitable, in its way, as his studies
are expected to be in the result of his investigations. On his way

CHAPTER VI.

THE gulch was filled with little dashing puffs of air, -now cool, now warm, but always freighted with the breath of the pines, and vital with that quality beyond analysis that four thousand feet above the sea-level and many a mile from civilization alone can give. The mountain hung above the two boys, towering in dark mystery, and shrouding the road in blackness, for all the luminous sky above; the creek splashed and tinkled in its hurry; the mill purred like a great cat, or thundered loud, as the wind varied. Here and there shone out a friendly cabin light; before the store a patch of yellow glow lay brilliant on the road.

Holton felt a joyous quiver go over him; he was of this, now; he was part of it, for every ounce that was in him, and beside him walked a faithful friend. It was good to be a strong young man, with a difficult game before him, in this new, sweet,

cleanly land.
"Tommy," he said, "I'm awfully glad I told you, and that you're going to help me out,—it was lonesome, before, "—and he laid his hand upon the other's shoulder.

"Sure, boy, and I'm glad to be in it," replied Tommy, "It's a hard racket we're up against, but we'll get 'em now; we'll get 'em." He rubbed his hands together in satisfaction. He had changed sides entirely,—no halfway youth was Thomas, straddling the fence of opportunity. "But suppose they get us!" he continued; "they won't do a thing to us."

"Say, how about that? Would it be likely to come to a showdown, if they found out what we vere after?''

"Well, others before us have worn holes in their skins for putting their noses where they * This story was begun in the November, 1902, issue of SUCCESS.

to work his nerve is put to a severe test in crossing a high and dangerous trestle; but he scores his first winning trick with the rough miners by climbing a rope one hundred and ten feet, hand over hand, to the top of an open cut, without touching his feet to the rocky side of the bluff. Holton Bennet's mettle places him at once on a firm footing with the miners, and his detective work begins. His employment as a tool-carrier is brief, and his next work is at night in the mill, where personal contact with the amalgamator confirms his suspicions that the ore is minus paying gold. His relations with Tommy Darrow continue most friendly, and they are more firmly cemented by a private wrestling match of which "Brockey" Cullen is the interested umpire, Holton proving an easy victor, and "Brockey" in turn, to Tommy's delight, is a victim of Holton's science and muscle in "side holts." Tommy is taken into confidence and becomes an ally in Holton's mission at the mine. As a "clean-up" day is near at hand, it is agreed that Tommy shall take the night shift at the mill, and Holton the day shift, that of the night being the more important to them, as the one to be devoted to special preparations for the expected visit of an expert. Tommy, having had long experience, was more likely to observe any work suggestive of fraud.]

were n't wanted. You can't tell what might hap-

"Phew!" exclaimed Holton. The night air struck him with a sudden chill. He fancied what it would be like to walk that black road, feeling that a man with a gun, and no very good intentions, was watching for him.
"What's the matter? You ain't afraid, are

you?" asked Tommy. "Indeed, I am," returned Holton, heartily.

Tommy burst into a laugh. "I'll tell you in private,—so am I," said he, "but that's half the fun. It's the shivers that put a taste to it. Howsomever, it's up to us not to let them get on. That's part of our game, and helps to make it interesting." He stopped short and held out his hand. "Let's you and me swear solemn to stick

by each other, no matter what fetches loose," he said.

So, there in the road, they swore gravely to stand by one another with fidelity, come good luck or bad, through battle, murder, or sudden death, earthquakes, or high water. It was a kind of performance that would seem a little foolish, done in broad daylight; but, in the inky shadow of the mountains, with the unreal world hemming them in, it was comforting beyond the mere words.

"Now, here we are at the store," said Tommy, getting briskly back to realities. "And say! Upon me soul, there's the doctor's daughter! And there's himself, as large as life, talking to Missouri! Do n't they make a pair of men, though? The doctor's the strongest man in the country. He's taken a cam in his hands and put it right up over his head,—I saw him do it, and they weigh two hundred and fifty pounds of cold iron. Come here, Bennet, where you can see the girl!
Ain't she a beauty? Can they beat her where you come from?"

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Holton looked, and swallowed a gulp of surprise. He had formed no definite notion of what the doctor's daughter might be like, being only moderately interested in young women, anyhow, and feeling himself too busy to waste time in smalltalk, at present, in particular. But this,—this was something he had n't bargained for.

She was seated beneath a lamp, and the soft masses of abundant hair threw her face in the

shade, yet the patent of beauty was marked on every line and light and shadow. There was more than that: her gestures, the poise of her head, the whole atmosphere she carried with her, proclaimed a strong personality. This was no commonplace,

a strong personality. This was no commonplace, spoiled, childish camp pet.

"Can they beat her?" repeated Tommy.

"No," said Holton, "they can't."

"If it was only good looks, I would n't care so much," continued Tommy, "but that girl,—well, she's a gentleman, now, like her father before her. You're my pardner, and I'll tell you something, small chance I've had to get schooling. thing: small chance I've had to get schooling, having to run the family, mother and the three kids, since I was twelve years old. Well, I got talking to Loya, there, one day, and wishing I knew a little more, and what does she do but get her books together and teach me, nights. And she tells you things sensible, so you can understand. There's algebra. That's awful truck when you first bunk into it. It seems like it was made for young children,—multiply x by y and the result is xy; that is to say, you multiply Smith by Jones, and the result is Smithjones, just where you started,—anyway, that's how it looked to me. But she told me this, that, and the other thing, till I saw it was a man's work, after all. There a heap of good thinking in that same algebra, but of course you know all about it. Well, that ain't of course you know all about it. Well, that ain't what I'm getting at, anyway. My point is that that young lady had the heart to care about my knowing more, and the goodness to teach me, which, the Lord knows, was no easy job! Now, if you've just got the good heart and no wits, like Pete Gratton, or the good wit and no heart, like Johnson, you ain't much use, after all. It's doing the two up in the same package that counts. So she took me through algebra to two unknown quantities, and I thought that was enough for me to know, and the first four books of g'ometry, which is the most reasonable stuff in the world, and all this without letting on how much smarter she was than me, nor anything to make me feel small, but just like,—well, just like you, Bennet, for all the world!" concluded Tommy, giving his companion's arm an affectionate grip.

Holton felt something hot come up behind his eyes. "Why, Tom!" he stammered, in embarrassment, "I have n't done anything!

"Just what I was saying," continued Tom, se-renely. "It's what you might have done and didn't that counts. You'll like that girl, old didn't that counts. You'll like that girl, old man, I know you will. You might think she is too quiet,—that she has no spirit,—but do n't let that deceive you for a minute. She's got the sand when the time comes. Never will I forget once down at the old Silver Star. I was just turned fifteen then, and off-bearing for the saw-mill. The mill shut down, one day, and I took a walk into the country. A ways out, I met Loya on her pony, riding toward camp. We stops awhile for a talk, when all of a suddent there comes the horriblest hoots and yells you ever heard, like somebody being painfully murdered by inches. And that's just about what it was, for, when we streaked it to the noise, there was Injun Oscar beating his poor little shadder of a wife. Half-Dutch and half-Injun was Oscar, -the worst combination in the world, -be thankful it's rare! And himself was an ugly big brute standing a hand over six foot, and looking more like a thin-whis-kered gorillya than a man. I felt all cold in my stummick, for fear he'd give me what was left over, for spying on him. But not so Loya! She was n't quiet that day. She was off her horse in one lep. 'Come on, Tommy!' says she, and, of course, I had to go, by luck picking up a stout bit of wood on the way. The first thing Oscar knows, there's Loya beating time and the primer out of his head with the quirt, [Man, how she laid it on to him!] and gasping, between her teeth, 'You cowardly, great beast,—you beast!' And he'd have hit her, too, -he had no more shame to him than a poor man's pig,—but I slipped behind and nailed him with my bit of stick, and down went his shanty. And then his old woman called me names for thumping her man! Well, we went away from there, Loya all white and shaking, and we did n't dare tell all that happened in camp, for we knew Missouri and the doctor, to say nothing of twenty other husky lads, would go down and make life real and earnest for Oscar while it lasted. But Missouri went down and reasoned with him, anyhow. A month later, Mr. Oscar was wearing bandages over some of Jack's most powerful arguments, so I think the wife-beating husband did n't flourish for a time. But if you'd seen that girl Loya when she made her dash at him! She was fine; not two bits did she care what come to herself; and all the rest of the time so quiet and gentle, you'd think she'd faint at a mouse! Well, here am I, chinning, when I ought to be about my work. Run in, Holton; Missouri'll give you a knockdown to Loya."

'All right,—see you later.''

Before Holton stepped briskly into the store. him was a group: the girl, sitting, with her father towering above her, on one side, and Missouri Jack towering still higher on the other. Other men sat or stood around in interested attitudes.

Something was under discussion.
"Drat Cutter!" said Jack, "what did he have to run away for, just this day? Hello, there! Ain't you on shift?"

"No; Tommy and I traded."

"Taking the night turn about, eh? Well, that's sensible; a man wants to see daylight once in a while. Here's some strangers; let me make you acquainted with Miss Loya Broughton.'

Holton walked forward; the girl arose and extended her hand with the simplicity and grace of a well-bred lady. "I'm sure I shall be glad to know you," she said, "and I wish Jack had told me your name."

Holton laughed. "Bennet,—Holton Bennet," he said. She made room for him beside her. "There's my father, Dr. Broughton, Mr. Bennet," she continued.

The doctor stepped forward, in salutation. Holton noticed at once dignity and distinction in his bearing, a courtly ease of action, and a graciousness that could only be bred in the bone. Nowhere do fine manners set with prettier effect than on a very large man. It is rather unexpected, for one thing, and there is so much to it, necessarily, for another. The younger man felt instantly drawn to the doctor, -almost as much as he was to the doctor's daughter. The one full look he had given her showed that she maintained every promise offered by his observation through the store window. Indeed, on close inspection, one almost forgot she was beautiful, so much did her soul live in her face. Holton breathed a little quickly. Somehow, he felt as if he had known her for a long, long time, and had liked her very much during the period. It was a curious sensation, all the more so to him because he and sentiment had been strangers theretofore. In silence he took the seat that had been so frankly proffered, trying to adjust his mind to the new conditions, and grown suddenly shy. For the first time in his life he could think of nothing to say.

But she spoke out of the spring of her young

"We are hoping to have a dance," she said. "That was what we were talking of when you came in, but Cutter, the blacksmith, and the only

UAKI,

man in camp who can play a fiddle, has taken this occasion to go away. It's too bad. Have you ever seen one of the dances here? No? Well, they're the most happy-go-lucky affairs in the

"Why, where do they get the women?" Holton asked, in surprise.

"Oh, they start out with a team and gather them up; not many, you know. Some of the men have to play lady. Yet there are some nine or ten women that can be counted on. I wanted to have a dance. I have been living out in the wilderness a dance. I have been fiving out in the winderness with father for three months, and now I want to have a wildly exciting time."

Suddenly, Holton remembered. "I can fiddle a little," said he; "never tried dance music

dle a little," said he; "never tried dance music much. However, I know three or four waltzes." Her eyes brightened. "Can't you play any square dances?" she asked, eagerly. "Waltzing is n't the staple of the camp; do n't you know the 'Buffalo Girls,' or the 'Arkansas Traveler?" "How do they go? I do n't know 'em by name."

She pursed up her lips and whistled the "Traveler".

She pursed up her lips and whistled the "Travmost melodiously.

eler' most melodiously.

"George! that's pretty," said Holton. "I don't know it, but I could pick it up by ear in a moment, if you'd whistle it for me a few times."

"Good!" she said; "we're lucky. Jack! Oh, Jack! Mr. Bennet can play the fiddle; hurry up and get the others."

"That so, Bennet?" said Missouri; "well, why haven't you let on before? Hustle, Ed, hook up your trotters and pick the ladies up. Wait a minute, Bennet; we'll ride you up to Brockey's for the fiddle. Loya, you want to go along? Nice night for a ride; moon'll be up in a half hour. Say! I'll get the other team and fill a wagon with Say! I'll get the other team and fill a wagon with hay, and we'll all go;—are you with us, Bennet?

And you, Doctor?" Holton acquiesced at once.

"I hope nobody thinks I want to miss any part of the frolic," said the doctor.

When the teams of fine, spirited mountain horses came up, all piled into the two vehicles, one an ore wagon filled with hay, and the other a four-seated mountain rig.

They pulled up at the hotel, for the violin, and Brockey came out, at the sound of so many voices. "Come on, Brockey!" they all cried; "we want

Never a word did the ex-cow-puncher ask about the occasion, but got aboard instantly. Holton came running with a roll of music and his fiddle-case, and away they went.

For the first part the road was level, and Holton, sitting beside Loya, devoted his time to learning the new tunes. But then they came to where the road was not so level, where the moon, looming above the further side of the chasm in a circle of cold, pure fire, showed a gash to the left, seemingly bottomless, and lumps, and humps, and bumps, beyond count, in the road ahead. Fiddling was out of court. Hanging on with both hands and holding one's breath were the order of the day.

"This is-a-pretty bad-road," he said, in a dislocated sentence.

who had to cover that trail twice a week. He was who had to cover that trail twice a week. He was as gray as a badger, when he began it, but at the end of two months his hair had turned perfectly

"What's this you're giving us, Brock?" asked Missouri.

"History,-plain history." "Hair turned black?"

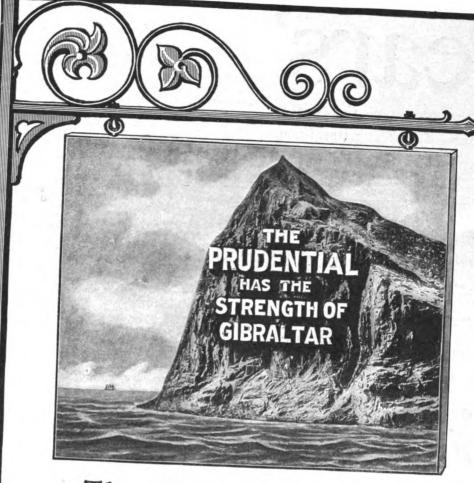
"Yes, sir! turned black; and the only way the camp doctor could account for it was that the exetcise them hairs had, standing up whenever the old gent came to the steep places, restored 'em to their pristeen color and vigger.'

"Brockey, you're yarning!" said Missouri, while

"Brockey, you re yarning: said Brockey; "but the others in the wagon giggled.
"That's as it may be," said Brockey; "but you'd better haul around and jam the brake on. said Brockey; "but My hairs is preparing to get on their feet this

Then they plunged into a tunnel of spruce, where the darkness hung before them like a curtain of

"Ain't this a place for a ghost, though?" asked Brockey, after they had gone some distance within.
The pounding of the horses' feet and the rattle of wheels were muffled by the strewn branches and needles of the road. It was spooky.



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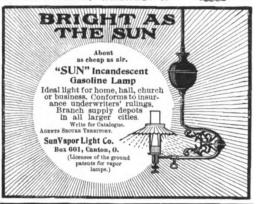
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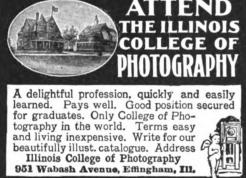
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"Hello!" called a voice in front of them,—a curious, level voice, that conveyed an impression of monotony in the one word.

"Well, well! I've raised one!" said Brockey.
"Who be you, my friend?"
"I'm Pete Gratton," continued the voice;

"that you, Brock?"

Holton felt his companion move suddenly, and as suddenly it occurred to him that here was the man who "follered her around like a shadder."

After the question and its answer, the wagons stopped, and, feeling his way, Pete Gratton climbed into the forward one.

"How do you do, Pete?" said Loya. Her tone

was kindly, yet not overjoyed.
"Howdy, Loya?" replied the young man. "I heard you'd struck camp, and was going over to see how you were; you're going for a dance?"

"Yes; we thought we would have to give it up at first, as Ed. Cutter is away, but it luckily happens that Mr. Bennet here can play the violin, so we are going to celebrate my return, after all. You don't know Mr. Bennet, do you? This is Mr. Peter Gratton, Mr. Bennet."

"You'll have to consider your hand as shaken, Mr. Gratton," said Holton, laughing; "I could n't find my own left hand with my right, in here."

"Yes, sir," replied Peter, gravely. There are as many colors and actual forms in a voice as there are in a face. This one impressed Holton strongly with the feeling that while Pete Gratton had lacks, as witness his serious acceptance of a mild witticism, yet, on the whole, he was a nice fellow. was an honest voice, and held a touch of pathos, like a faint odor of lavender. He felt an instant friendly interest in Pete, instead of the antagonism he had expected, as if the other were a child, or, rather, in some way, helplessly out of the competition. He began to wonder what sort of man he was in appearance. A wrestler, and tall, as told by the height his voice sounded from; he should be a well-made man bodily, at least. But what manner of face would go well with that old-fash-ioned utterance?" Bennet was conscious of some-thing like a shock, when they pulled up before the first cabin, and, in the light that streamed from the doorway, he caught his first look at the other man; for, in a curious, haunting, thin, melancholy fashion of his own, Pete Gratton was quite the handsomest young fellow he had ever seen.

It would only need a touch here and there, a sort of general "bracing up," to make that dark face regal. As it was, you missed something you could

not place.

"What or who is it he reminds me of?" Holton asked himself, puzzled to the point of annoyance by a fleeting memory. It came right to the point of realization, slipped away again, and then it flashed upon him. "Don Quixote in his youth!" he said to himself; "that's it!" And so it was.

In the meantime, the cabin was in commotion. A tall and comely girl had stepped out to greet the visitors.

"Ma!" she called, "here's the Bonanza outfit wanting me to go there to a dance!'

"Did they say anything about me?" came the answer, and a woman's smiling face appeared in the doorway.
"Or me?" added a bass, and a bearded face

appeared,
"Sure!" replied Missouri. "Pile in here, and don't keep us waiting.

"Can't you hold a minute till I fix up a little?" asked the girl.

"Get a hustle on you, then," commanded Missouri; "other people that don't know we're com-

ing are anxiously waiting."

"Be out in a jiffy," said the girl. The door shut and the sounds of a wild scramble issued from

the cabin.
"Mother, what you done with my other boots?
Can't find 'em nowheres,' complained the masculine voice.

"For the land's sakes, Bill! If I didn't give them boots to a poor prospector that hit along here the other day with his toes out! I never thought to speak to you about it!"

"Give my boots away, and not tell me a word!" cried Bill, with choler; "I want you to know I paid seven dollars for them boots!"

"Now, Bill, if you'd'a' seen that poor feller! And don't talk so loud; they'll hear ye outside,—

you bean't mad about it, be ye?"

"Naw!" said the man; "but I wisht you'd tell
me when you do anything like that. Some day
I'll find you've guv the hull place away and I won't have a spot to put my head, -ready, there,

GLASS OF WATER Upset Her.

People that don't know about food should never be allowed to feed persons with weak stomachs.

A little over a year ago a young woman who lives in Mercer, Me., had an attack of scarlet fever, and when convalescent was permitted to eat anything she wanted. Indiscriminate feeding soon put her back in bed with severe stomach

trouble and inflammation of the kidneys.
"There I stayed," she says, "three months, with my stomach in such condition that I could take only a few teaspoonfuls of milk or beef juice at a time. Finally Grape-Nuts was brought to my attention and I asked my doctor if I might

eat it. He said, 'yes,' and I commenced at once.

The food did me good from the start and I was soon out of bed and entirely recovered from the stomach trouble. I have gained ten pounds since my recovery and am able to do all household duties, some days sitting down only long enough to eat my meals. I can eat anything that one ought to eat, but I still continue to eat Grape-Nuts at breakfast and supper and like it better every

day.

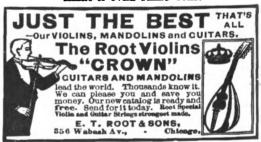
Considering that a year ago I could stand only a short time and that a glass of water seemed 'so that Grape-Nuts has heavy,' I am fully satisfied that Grape-Nuts has been everything to me and my return to good health is due solely to it.

I have told several friends having nervous or stomach trouble what Grape-Nuts did for me and in every case they speak highly of the food." Name given by Postum Co., Battle Creek, Mich.

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She was not a spoiled, childish camp pet "

"All ready, pa.

The door opened, and out popped the inhabitants on a run. The whips cracked, and the procession moved. So it went for five cabins, tucked away here and there in the timber, each one adding

its entire stock to the hilarious party.
"Now there's only Steve Meadows's ranch and
we're all set," said Missouri. But at the Meadows's came the first hitch. Steve was a rancher, with stock to be looked after early in the morning; besides, the baby ought n't to be taken so far—fifteen miles,—and back on such a night. Curly-headed, blond Steve was a general favorite, with his fun and good nature, and his pretty little wife shared his honors easily. They could n't be left out; no one would hear of it. Then Steve had an inspiration. Why not dance right where they were? There was the barn, with ample floor space; he had a parlor organ that two men could be out,—some thing of which Bonanza could n't boast, -and, as for grub, why, they could make it somehow. suggestion was adopted enthusiastically, at once.

"Give us a broom and a lantern and we'll sweep up, Steve," said Missouri.

"Sally, you jump on one of them horses and go along with Brockey back to the house. Bring along them biscuit and the pies I baked to-day," said the lady of the first house visited. The horses were stripped of their harness, Sally mounted one, bareback, Brockey jumped on the other, and so much supplies were assured.

"Say, I'm shy on coffee!"
"Can you yell after them?" called out Steve. But the commis-

sioners were out of hearing.

"Here, I've got a plenty at my shack,—come along, old lady, let us have a ride," said a man. He and his wife bestrode two more horses and cantered down the trail.
"Is n't this fun!" said Loya, turning a beam-

"Is n't this fun!" said Loya, turning a beaming face toward Holton.

"Indeed it is!" he laughed back. "Things move with a swish, don't they?"

"They do,—see how astonished the horses look, peeping out from their stalls! They must wonder what's going on. Don't raise so much dust, Jack! Wait a moment until I show you how to sween!" Wait a moment until I show you how to sweep

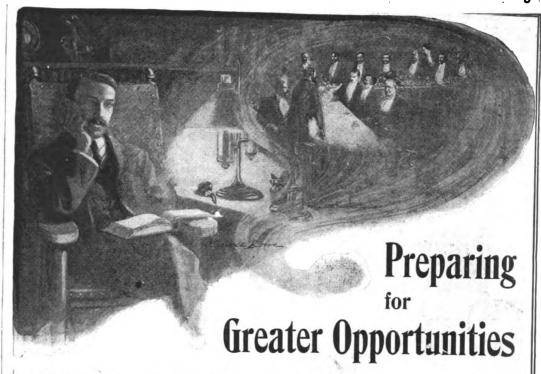
So, with chaffing, hustling, and merriment, the barn was made ready.

oarn was made ready.

"What's the matter with giving us a tune, musics, while we're waiting?" asked Missouri.

"Fill in the time until the others get back."

"Well, I like that," cried Loya. "Calling our music 'filling the time!"—shall we play for them



HOW often, in speaking of a man who has achieved conspicuous success, do we hear the remark, "Ah well! He was fortunate; his opportunities were greater than mine"? True, his opportunities may have been greater, but this should not be attributed to fortune. The successful man prepares for and makes his own opportunities. He leaves nothing to chance. What may seem to others his good fortune is the certain result of his long nights of preparation. Depend upon it, the man who becomes famous in a single night has spent years in preparing for the event.

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after that, Mr. Bennet?" She had seated herself on the organ bench, and glanced around at him.

Holton felt a pleasant thrill at being thus connected with her, through the music. He knew she played well; she must, with that face and figure. and, as he took the old fiddle in his hands, [It was the one valuable thing he had ever owned, that small box of wood, filled with music, from years of use.] he had a sudden sense of comfort. Very good it seemed to take hold of the violin again. "Why, yes, we may as well be generous," he said, recalling himself. "Is that accompaniment possible on the organ?" He spread the piano part of a Polish dance before her. She shook her head doubtfully. "It's meant for a piano, most emphatically," she replied; "but they say, in this country, that even his Satanic Majesty hates a coward. I can stand the result if you can, and the audience will have to. Ready?" to. Ready:

They plunged into it with a swing and dash, and all through its quick, unexpected turns, its infinite grace and delicacy, its tender little interlude and fiery finish, they held together like one

instrument. It really was well done.
"Good leather in you, boy!" shouted Missouri, clapping his hands. "You can rip a fiddle! Give

us some more!''

"More!" cried the audience. "More! More!" The color crept into Holton's face. He was a modest lad.

"I knew you could play the violin," said the girl, softly, as he bent over the music rack, and his color deepened. "You supported me, as if you read my mind," he said; "I never had such backing before, -never felt that I could let out."

"Thank you," she replied, with such genuine gratefulness that the simple words were enough. "Oh, here's 'Last Night." I love that,—and all of us here like songs of sentiment. Shall we try

"It's one of my favorites, too," he said.

He played it as well as he knew how, realizing that he was playing beyond his former self. The bow lived in his hands; it caressed the strings like a mother's touch. The morendo died like a dolphin, - full of color to the last. It seemed to linger on into the silence; and silence there was, to such a length that Holton finally turned and looked at his audience, in some apprehension. Men and women alike, they gazed upon the floor, or, with heads back, stared dreamily upward. It was a tribute as complete as it was well-deserved.

He looked back again at the girl. She also saw a vision. The noble pride of the artist went through the young fellow's veins like wine.
"Would you please play that again?" asked the

voice of Gratton. Ho, on saw the somber eyes of the wrestler, and again i e felt that tug of sympathy for the man.

"Certainly!" he said in courteous answer to the polite request, but on the instant he was saved from the perils of repetition by Brockey's war-whoop at the door.

"Here's your good home-made grub!" he yelled. "Show a light, somebody!"

CHAPTER VII.

THE barn was gay with candles held by miners' candlesticks jabbed into the walls. vibrated to the rollicky, "let-'er-go' strains of the "Arkansas Traveler" calling its invitation to the dance. Brockey was in his element, "calling off." He swung his arms, did jig-steps by himself, and cut pigeon wings, as he named the different figures. "Al-le-man left!" "Right hands acrosst!" "Ba-a-a-lance corners!" "Swing your lady!"

The whole building rocked in time to the flying feet. Into the faces of the dancers the blood came, and their eyes grew brilliant, -something barbaric, antedating records, entered their souls,—that which fans the Indian's opaque black eyes to glowing when he hears his wild chanting, and the "boom-blip" of his drums.

It was the magic of the pied piper. Holton felt it creep into his bow-arm, and fiddled away like a madman; he saw the girl beside him, with nostrils quivering with excitement, her fingers racing over the keys. The men leaped into the air, or did strange and graceful steps impromptu, whooping to let off some of the spirit that boiled within them.

"Cut that ol' fiddle loose! Hit'em and split

'em!'' yelled Brockey.

The faces whirled in and out of sight, the figures blent, separated, glided here and there; no matter what vagaries were introduced, every foot hit the ground in unison; nothing could exceed the wild

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On the advice of my surgeon, I tendered my resignation and with my heart full of regret and my nervous system shattered, I returned home. Almost the first thing the doctor whom I consulted advised me was to quit coffee. That was the first intimation I had that coffee had anything to do with my condition. The next thing was 'what shall I drink?'

My wife's mother used your Postum Food Coffee and knew how to make it right, so I tried it and grew very fond of it. My nervous trouble soon left; my old time health came back, and that Fall I gained so in flesh that the boys on returning after 'muster out,' hardly knew me. Quitting coffee and using Postum did wonders for me' for me.



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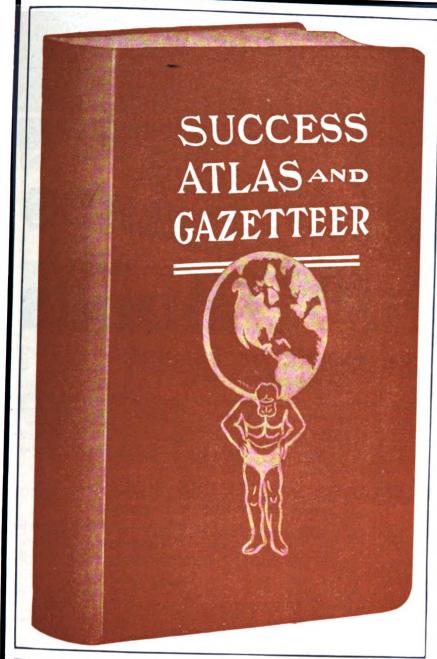


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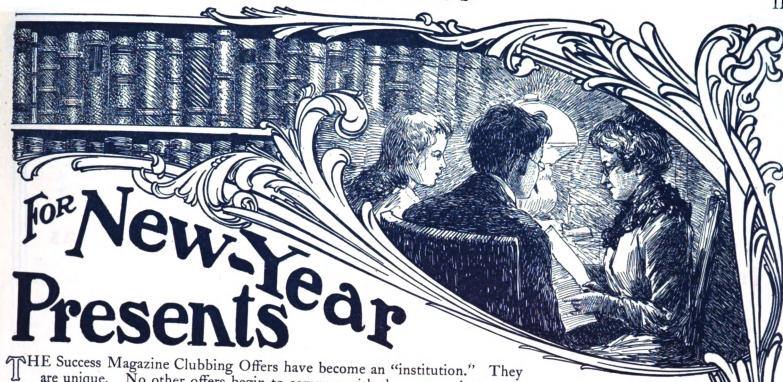
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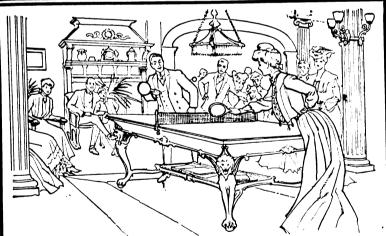
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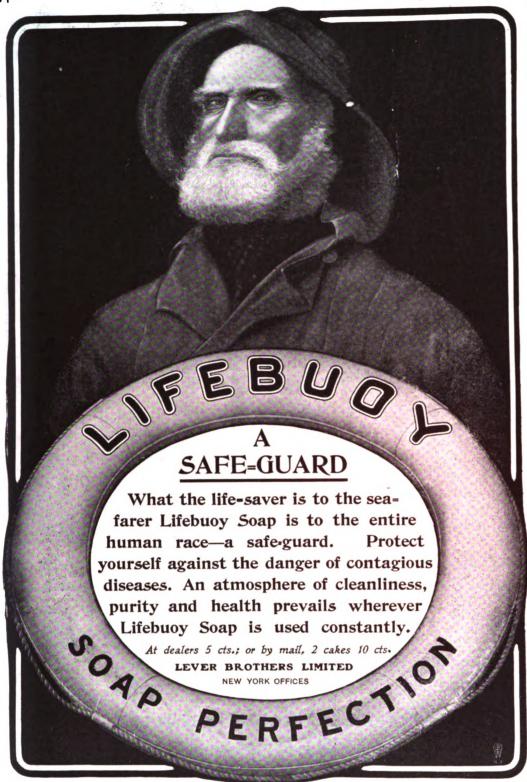


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grace of the dancers, men and women alike. Above the beating feet sounded the "Arkansas Traveler," exultant. Twenty voices caught up the air, "Big Joe,—Little Joe,—Big Joe Davies!" It meant something to them, those pioneers. had heard it in camp, on mountains, and on lonely prairies; they had heard the darkey "roosters" sing it on the river steamboats, when water travel was enlivened by rifle practice with the Sioux from the river banks. It was a natural growth, a folk-song of their vivid life in its happier aspects. is a reckless tune, and breathes the extremest disregard for anything or anybody; yet, if you have been brought up on it, it will bring the brine to your eyes as quickly as "Home, Sweet Home."

On the young Easterner, the whole scene bore with the power of fascination; he had never before felt so excited; it touched the primal, decent, savage part of him, that years of convention had hidden under collar and cravat. He wanted to get out on the floor and whoop and dance with the rest of them,—to do something, anyhow; and he took it out of the fiddle. Sometimes it seemed to him as if all the rest were phantoms that the fiddle had materialized, -as if, if he should stop for an instant, he would find himself alone; then, again, his fancy would twist 'bout face, and he would seem the unreal thing. All the time a sort of stalwartly sane young Bennet, underlying this other, enjoyed the wholesome fun. It was so different from the square dances he had occasionally walked through at home, in its difference pointing the moral of doing whatever you find to do with a yeave-ho! and a chestful of fresh air. The fury these folks threw into their dancing made it. They entered into the play with the single-mindedness of children, their exceptional common sense, taught by meeting real conditions, instead of the whims of civilization, telling them that, if they wished to be as happy as childhood, they must use the methods of a child.

It is strange that men will toil and fight and cheat, robbing their own souls, as well as their neighbor's pocket, in that pursuit of happiness warranted by the constitution, and, although esteeming themselves the wittiest of men, entirely miss

the simple solution that a baby knows.
"Prommernade to yer seats!" shouted Brockey,

and the dance was over.
"Phe-ew!" said Holton, mopping his forehead; that's warm work! How do you feel, partner?"
Oh, I enjoy it all!" responded Loya.

"I didn't mean criticism," continued Holton, quickly; "I don't believe you can get a bit more pleasure out of it than I do. My! How they do pitch in! I wonder if we shall have a chance this evening? I can't keep my feet still."

"I hope we shall!"

"I humbly beg the pleasure of escorting you through the first opportunity," said Holton, with a laughing exaggeration of a "fine" manner.

Granted,—but the chance is slim; we must be content with feeling satisfied in ministering to the others.

"Take yer pardners for cheatin' jig!" shouted Brockey. "The orkester'll kindly waft the strains of 'Buffalo Gals' upon the air."

There was great fun at the "Promenade all!" where the man in the middle tries to steal some other fellow's girl from him, and put the cheated one in the center. In the midst of the scramble, Holton thought he heard a laugh from the door-Turning, he saw two men's heads thrust in. At the same instant, a young fellow in one of the

sets caught sight of them.
"Hello, boys!" he cried, and rushed to the door. It was good to see the honest delight in the meeting. The three pump-handled away, thumped each other, and jabbered all at once.

stopped dancing, gathering about the newcomers.
"Well, who'd ever expect to see you up here?" at length said their friend, whose name was Crim-

at length said their triend, whose name was Crimmins. "Last I heard of you, you was pointed South,—never expected to lay eyes on you again."
"We've just come up from Arizony," replied the taller of the strangers. "Camped down the creek a piece, and, hearin' the racket, thought we might cut in. No intrusion, I hope?"
"Not a little bit!" said Missouri, promptly.

"You're more'n welcome, -get right in here and

shake a foot!" "Hold on a minute,—we brought some music boxes with us to help out the band." The two stepped outside and returned with a banjo and a guitar.

"Great Scott, Harry! Do you fellers tote things like that around with you?" asked Crimmins. "Oh, we travel in style, now, Crim," said Harry;

'we' ve got a team, ain't we, Paul?'
Digitized by

"And a tent, -complete outfit; we hit ten-dollar dirt in Arizony, and sold out our claim for a cold two thousand," responded Paul.

"Hoo! puttin' on millionaires, now, eh! Well,

can you play them things?"

"Huh! wait till we tune up; you'll see. Meantime, go right on with the hop. We'll wait till that's over to get introduced. Would you mind giving me the "D" there, ma'am?"

For a moment the two picked at the strings, then "All set!" they said, and the dance was on again. The next time the strangers danced.

When they came back Harry said, "Go on, you two; you don't want to be cooped up here all night."

He glanced at them with a shrewd and kindly re. Something in his expression embarrassed the young people a trifle. Holton offered his arm the young people a trifle. Holton offered his arm rather formally, in consequence. As they moved off, they heard Harry say to his partner, "Nice lookin' pair, that couple, ain't they?" The boy ground his teeth, as he felt the telltale blood rise in his cheeks. He looked at his companion out of the corner of his eye and felt relieved. She, too, was blooming as a rose, and her glance was directed at the floor. Holton's courage rose promptly.

"Well, we have our chance, after all," he said; "but you'll have to help me in the figures, for I don't know half of them."

don't know half of them."
"I will," she replied, shyly. Then they stood in line. It was a most ecstatic dance. Holton decided that it easily surpassed any amusement he had ever before participated in. And didn't she dance like—what? Not a fairy, surely; that supple, strong young figure was far too vital for fairyland. There was no comparison. She was above competition.

Occasionally Holton saw the doctor, as he went through his evolutions in another set with oldfashioned courtesy much at variance with the abandon of the other men folks, look at his daughter with fond pride, and, from the corner where he sat, Peter Gratton followed her continually, with a melancholy intensity.

It was over, and Holton led her back to the organ bench. Gratton rose and went toward them. "Won't you dance the next one with me?" he asked. The tone was as pleading as a child's,—odd, in so large and strong a man.

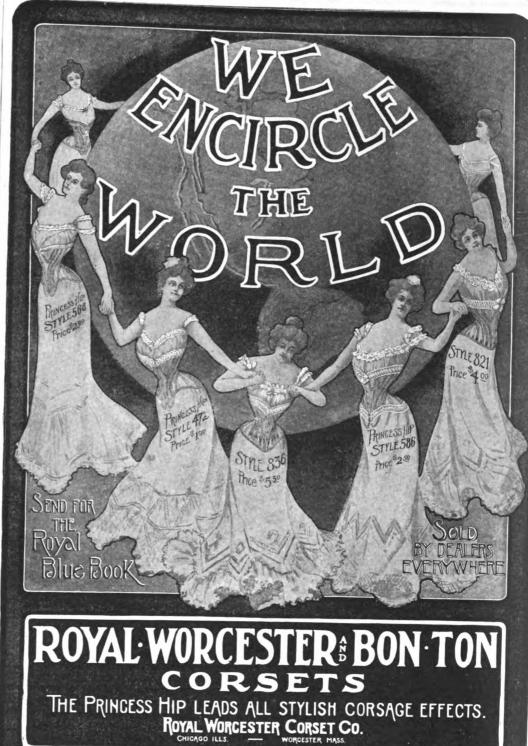
The girl hesitated the merest fraction of a second, yet Holton saw a change come in Gratton's -a shade, as of one who expects disappointment but dreads it. His sensitiveness was keen; the fibers of the gently, knightly spirit, housed in the powerful body, quivered at vibrations many a man would let pass unnoticed.

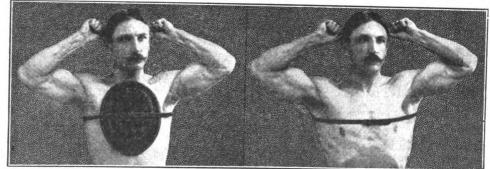
Loya, as quick as he, saw the change in him, and endeavored to make amends by an added graciousness in her acceptance. Gratton smiled quietly, taking the manner in the spirit it was offered, yet unconvinced, and the pair responded to Brockey's call of "One more couple wanted."

The little by-play interested Bennet deeply. He was continually astonished at the sharp perceptions of these people in regard to human relationtions of these people in regard to numan relationship. A tone was enough for them,—nay, even a tightening of an eyelid. He had wondered why this should be the faculty of people who lived outdoors and in the simplest fashion, until he hit on the obvious solution: they knew, because they cared. In this scant community, each human unit had a value,—he was like a dollar to a poor man; whereas, in the teeming East, his personality counted for little, unless it was exceptional. Men and women were too numerous for their shades of character to be worth study.

As a lawyer in the East might watch his jury, noting every countenance to see what headway he was making, and what he would better say next, so would Missouri watch your face in talking, if he liked you and were the matter of unusual concern, responding to your mood with the readiness of a lawyer. The big, daring Westerner moved as softfooted as an oriental diplomatist, to avoid wounding a friend. This was shared by all in the camp, (barring Johnson,) according to their natural gifts. But, ah me! if you were not a friend! Then speech smacked of wild life, and it was as often as not the old-time word and blow, with the blow in the lead. in the lead.

Holton looked on while the two newcomers twanged banjo and guitar. It was entertaining to see the seriousness with which they regarded their part. Harry plucked the chords of this games if much depended on it, his weather-beaten face, and great hairy, calloused bearded to the eyes, and great, hairy, calloused hands peculiarly out of keeping with the instru-





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NOTE.—If not ready to avail yourself of the opportunity of taking my course of lessons at the present time, you will find my book, "Lung and Muscle Culture" highly interesting and instructive—It is fully illustrated, describing correct and incorrect breathing, and discusses other vital points concerning deep breathing. This little work is well worth ten times the small price asked. Sent on receipt of Ten Cents.

P. von BOECKMANN, R.S., Editor of VIM, a magazine devoted to Physical Culture and Hygiene.

1173 HARTFORD BUILDING, UNION SQ., NEW YORK
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We have no agents or branch stores. All orders should be sent direct to us.

Reduced Prices on Suits and Cloaks

nouncement of our Reduced Price Sale, so act quickly if you wish to take advantage of it.

Suits, Skirts and Cloaks made-to-order of bran new materials, and splendidly finished at one-third less than regular prices.

All of the fabrics are suitable for either Winter or early Spring wear. Nearly all of our styles and materials share in this reduction. The Catalogue and Samples tell of many, offerings like these.

Suits, in the Newest models, made of up-to-date materials and lined throughout, suitable for Winter and early Spring wear; for-mer price \$10, re-duced to \$6.67.

\$12 Suits reduced to \$8. \$15 Suits reduced to \$10.

\$15 Suits reduced to \$16.67.

Latest designs in Skirts, with just the proper style to them; former price \$5, reduced to \$3.34
\$6 Skirts reduced to \$4.
\$7.50 Skirts reduced to \$5.
\$10 Skirts reduced to \$6.67.

Handsome Costumes of Black Velvet Cords and Corduroy, former price \$17, reduced to \$11.34.
\$19 Costumes reduced to \$12.67.
\$21 Costumes reduced to \$14.

Jackets, former price \$10, reduced to \$6.67.
\$15 Monte Carlo Coats reduced to \$10.
\$18 Monte Carlo Coats reduced to \$12.
Rainy-day, Traveling and Walking Skirts, indispensable for wet weather; former price \$6, reduced to \$4.
\$7.50 Skirts reduced to \$5.
\$9 Skirts reduced to \$6.

Reduced Prices on Rainy-day Suits, Traveling Suits, Raglans, etc.

Catalogue, Samples and Reduced Price List will be sent free by return mail. If the garment which we make you should not satisfy, send it back promptly, and we will refund your money. This is the last announcement of this sale, so act quickly if you wish to take advantage of it; it will last only a few weeks and the choicest goods will be sold first. Be sure to say that you wish the Winter Catalogue and Reduced Price Samples.

Our new Spring Catalogue will be ready January 26th.
Every well-dressed woman should have one; write now, and we will mail you a copy with a full line of Spring samples as soon is issued. Be sure to say you wish the New Spring Catalogue and Samples.

THE NATIONAL CLOAK COMPANY, 119 and 121 West 23d Street, New York.

ROBINSON'S **Bath Cabinet OVERCOMES** RHEUMATISM

Gives new life and vigor to every organ of the human body. Thousands of people are daily sufferers because they continue to clog the circulation with poison, in place of eliminating the uric acid from the blood by Hot Air Baths.

Every intelligent person ought to know by this time that heat is almost the only relief for disease.

Write for des-criptive matter and special 1903 and special 1903 proposition.

Good inducements offered to reliable men and women on both commission and salary basis.

Robinson Thermal Bath Co. 645 Jefferson St., Toledo, Ohio

ment. Yet he played with considerable skill.
"What kind of looking man is this blacksmith,
Cutter?" he suddenly asked Holton, without turning his head.

"Eh?" said Holton, doubting that the remark The newcomer repeated the was meant for him.

"Oh, he's a pretty heavy-built man, with a small head,—reddish hair,—has a quick way of shooting his eyes at you when he talks." question.

shooting his eyes at you when he talks."

"That's the very man; he was at our camp this morning. Blacksmith, is he? I thought he must be a capitalist. He was wanting to buy some placer gold of us. Is he going to turn jeweler?"

"Do n't know," replied Holton, with a laugh; "he seems satisfied with sharpening drills."

"Curious; he looked quite put out when we told him we had n't packed any dust with us. So happened we had five hundred in gold coin that he traded us greenbacks for. Afterwards we two

he traded us greenbacks for. Afterwards we two got kind of leary for fear he was working a swin-dle on us. It's rather a relief to learn that he's all right. He said he needed twenty-five hundred

all right. He said he needed twenty-five hundred in gold, but was afraid he could n't raise it."
"Why, I had no idea Cutter was such a wealthy person!" said Holton.
"Lord! You can't tell here. Man may look as if he could n't buy a suspender button, if they was giving a suit of clothes away with a pound of tea, and, come to find out, he's got rocks enough in his cellar to ballast a ship. Can't judge a man by his looks out here. no more'n you can a black by his looks out here, no more'n you can a black cat at the bottom of a prospect hole in the mid-dle of the night."

"Here!" interrupted the indignant voice of the banjoist, "what kind of Chinese chords are you playin' there? You hit that guitar whare it sounds best." Then the call for supper resounded through the barn and Holton promptly forgot the incident. It was a hilarious meal, spiced with laughter and fun. Good digestion might wait on appetite or not, as he chose. If he preferred to sulk, the pies were fine, anyhow.

Afterwards came the ride home through the

hushed, moonlit night, the mountains standing back, with an air of reticence and splendor. Heights loomed enormous; chasms yawned abysmal. The pines sent up their incense like a prayer; the moon beamed down a benediction.

Again Holton and Loya sat side by side. It followed as a matter of course. They talked quietly, with fits of silence. Sometimes their eyes met; and then, although both felt a strange confusion, it was only by an effort they could look away. Holton thought her profile, cut out pure and delicate against the black wall beyond, the most exquisite thing that earth had yet produced. And she? Well, they made plans for future meetings. There was to be music, and walks, and rides, after work hours. There was a great deal to be done. Also she seemed loath to have the ride ended,it was such a God-given night! Still, end it must and did. Even through his healthy fatigue Holton's new thoughts insisted on a hearing. He lay awake an hour, wondering if he had met with favor in the lady's eyes, balancing the little incifavor in the lady's eyes, balancing the little little dents which seemed to show he had against the equally small incidents which seemed to show he hadn't, in fear and trembling. Then he put himself resolutely to think of the mill and his duty. "And I must sleep the rest of this night, or I'll be a wreck to-morrow," he said. He rolled over, determined to sleep till morning. But it was de-But it was dedetermined to sleep till morning. cided otherwise. He awoke suddenly with a sense of loss; what time it might be he could n't tell, but at least dawn was not at hand. What was the matter? He tried fruitlessly to drag an explanation from his sleepy brain. Then he heard a cautious footfall on the stair.

[To be continued in the February Success.]

The Reward of Service

ELIZABETH BARRETT BROWNING

The sweetest lives are those to duty wed,
Whose deeds, both great and small,
Are close-knit strands of an unbroken thread,
Where love ennobles all.
The world may sound no trumpets, ring no bells;
The Book of Life the shining record tells.

Thy love shall chant its own beatitudes Thy love snall chant its own beatitudes
After its own life working. A child's kiss
Set on thy singing lips shall make thee glad;
A poor man served by thee shall make thee rich;
A sick man helped by thee shall make thee strong;
Thou shalt be served thyself by every sense
Of service which thou renderest.

Rest satisfied with doing well, and leave others to talk of you as they please.—PYTHAGORAS.





Infants' Outfitting

There is absolutely no other place where this can be done so satisfactorily as here, either in person or through our

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If there is a piano in your home we will send you without charge seven splendid musical compositions, two vocal and five instrumental. Three of these selections are copyrighted and cannot be bought in any music store for less than \$1.00. With them we will send four portraits of great composers and four large reproductions of famous paintings of musical subjects.

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Chapped Hands

are the bane of the little tot's existence—and sometimes of older folks. Wintry winds raise havoc with tender skins.

FAIRBANK'S GLYCERINE TAR SOAP first cleanses the skin of all impurities, then heals, soothes and keeps it soft and velvety.

It makes a rich creamy lather and has pronounced antiseptic qualities.

Removes grease and dirt like magic, and lathers in hard or soft, hot or cold water. Each cake is wrapped and packed in separate carton.

Ask for FAIRBANK'S GLYCERINE TAR SOAP at your drug or grocery store. If you fail to find it, send us name and address for the quality by the free sample. It has an odor

"Like a Breath from the Pines."

THE N. K. FAIRBANK COMPANY, Department P, CHICAGO.

5

WOMEN'S REGAL SHOES made in all pop-ular styles, both dainty and mannish. Sold only in our exclusive stores for women, and obtain-able through our Mail Order Department.

Sole.

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style of Patent Calf or Enamel \ leathers.

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best, and how to be sure you are getting them, also illustrating 63 latest correct styles of Men's and Women's shoes. FREE ON REQUEST.

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INSTRUCTION UNDER MEMBERS OF FACULTY OF ARMOUR INSTITUTE OF TECHNOLOGY

All students are under the instruction of the very men who preside over the Laboratories and teach the classes of the Armour Institute of Technology. All work, therefore, will receive full credit toward resident work at the Armour Institute should the student at any time continue his studies there.

FOR EXAMPLE: Parts 1-6 of the work on Mechanical Drawing mastered under these auspices will be accepted as entrance preparation on that subject to the College of Engineering.

As a help in their studies, students in full engineering courses are furnished a technical Reference Library (in ten volumes) in addition to their regular instruction books.

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AMERICAN SCHOOL OF CORRESPONDENCE,

Mention Success.

Electrical

Perspective Drawing

Armour Institute of Technology, Chicago, Ill.

How Tom Rush Found a Camera

HELLO, Tom! I see you've got a new camera.
Where'd you get it?" This was Rob This was Rob

Fraser's greeting.
"Found it," was Tom's brief reply.
"Found it? Never! You can't stuff me. People do n't lose cameras.''

"Well, it seemed like finding it."

This reply was only more mystifying to Rob, so he asked, "Well, how'd you get it, anyway?"
"You know our folks take Success," explained

Tom, "and the other day I came across an advertisement in which the Success people said that they'd give anyone a camera for getting eight subscriptions, They said it did n't make any difference whether they were new or old subscriptions. Uncle Joe always takes Success, and so do Aunt Lucy and Paul Ryder. So I just started out and asked all of them if they were going to take it another year, and if they would n't just as soon let me send in the subscriptions. All of them were glad to do it. So I got three right there. Then I asked Mr. Brown, the grocer, and he subscribed at once. The day after I read the advertisement I sent in eight subscriptions, and last week my camera came. Is n't it a dandy?"

"It certainly is all right," said Rob. "I wish I could get a printing press as easily as that."
"Well, you can," answered Tom, "almost as

easy. The Success people have hundreds of things that they give to those who get subscriptions. I've their premium list, and I'll bring it over, and you can find out how many subscriptions you'll have to get for a printing press. I think you can get one for fifteen.

Tom was right, and Rob got his printing press almost as easily as Tom did the camera. You may want a watch or a musical instrument, a book, or a Morris chair, an umbrella, a set of knives and forks, or a striking bag. Whatever you want, you are pretty apt to find it in the Success Reward List, which will be sent you free if you will write for it to Success, Reward Department, University Building, Washington Square, New York.

A Business Opportunity

HOW MANY of us there are who, in seeking for a greater or permanent means of livelihood are prone to look too far from our present surroundings. We are apt to feel that positions paying large salaries are only to be obtained in the great cities or some "boom" section of the country where fortunes are quickly made or lost.

As a matter of fact, young man, the opportunity for which you have been longing may lay unnoticed at your feet. Have you ever thought of making a business of securing subscriptions in your own neighborhood, to high-class periodicals? If this is the case, you have possibly done so with the idea that it is hard, disagreeable work; but if you should actually take it up and pursue it with the proper methods, your experience would, in all probability, be in line with the following excerpts from recent correspondence of The Success Company:-

To-day I worked three hours for SUCCESS, from 10 to 12 A.M., and 2.30 to 3.30 P.M. In that time I secured twenty subscriptions and sold fourteen copies of "Pushing to the Front" and "The Empire of Business." E. B. REYNOLDS, CANADA.

The work has been very pleasant to me so far, and the money has been the easiest earned that I have ever received.

S. KULDELL, Pennsylvania.

I take pleasure in sending you another batch of sub-scriptions. I am surprised at the ease with which I can obtain subscriptions for SUCCESS. CHARLES E. DALTON, North Dakota.

I received better pay for what work I did for your people than I ever received from anyone else.

HERMAN WISE, Colorado.

I have made many new friends while I have been working for SUCCESS, and find it the easiest work I ever did. It just sells itself. (MISS) PET BARGER, Texas.

Many thousands of dollars will be spent for magazines in this country during the next few weeks.

Write to-day to The Success Circulation Bureau, University Building, New York City, for details and instructions as to how you should proceed. There is certainly nothing to lose, and all to gain, by at least giving such work a thorough trial, even though you are able to devote to it merely your spare time. It requires no investment on your part, and you are an independent man with a business of your own. There are no bosses or There are no bosses or unreasonable hours.

Are you willing to pass this opportunity by? Can you afford to do so?

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THE WORLD OF

Arthur E. Bostwick

Thas been discovered by A. F. Collins, an electrical engineer, that high-frequency alternating electric discharges have an effect on the brains of men and animals, which behave toward them after the manner of the coherer used in wireless telegraphy. Mr. Collins believes that the instinctive fear of lightning felt by nervous persons is due to this action, and that when powerful enough, it may be injurious or even fatal.

A SUCCESSFUL imitation marble has been invented in Denmark. The best imitations have hitherto come from Sweden, but the artificial stone would not keep its shape, and the veins are said to have been stiff and angular. The new product, which is the discovery of Schongaard, of Copenhagen, is reported to successfully reproduce the soft transitions of color of the best variegated marble, and to last as well as the real stone, while its cost is about one-tenth as great. A slab half an inch in thickness can be made at fourteen cents a square foot. Columns, capitals, and moldings can be manufactured as easily as flat slabs.

•

WHAT is the average spacing of competitors in any kind of contest? In other words, what is the rating of number one as compared with that of number two, and so on down the list? This problem has been attacked mathematically by Francis Galton, the eminent English statistician, who concludes that the average interval between the first and the second competitor is thrice that between the The first prize should then be about three times as large as the second, and this, according to "The Lancet," of London, "confirms fairly well the general empirical conclusion at which most men who have much practical experience have arrived."

CURIOUS deformations of the sun's disk as it sets have recently been studied by Dr. Prinz, of the Royal Belgian Observatory, by the aid of photography. The most common of these are simply indentations of the disk. Sometimes there is an appearance as of flames issuing symmetrically from opposite sides and uniting above in a single jet, which disappears to give place to another, formed in the same way. These phenomena, according to M. Prinz, are due to horizontal layers of air of different density, which refract the sun's light. Some such appearance of the solar disk at sunrise may have originated the familiar legend that, on Easter morning, the sun dances as he rises.

WHEN coal or charcoal is very ely pulverized, it will burn much like gas. Attempts to utilize this fact have been quite successful, the best method employing a sort of rotating ventilator to blow the powder into the combustion-chamber. The resulting flame can be controlled as desired, and the method has many good points. A French paper, the "Revue Technique," describes it as "very seductive," but hesitates to recommend it, but heccause of the expense of proper pulverization and the possibility of disastrous explosions from spont-aneous combustion of the finely divided coal. Some of those who approve the method believe that a pulverizer may be attached to each furnace, which will grind up the coal as it is needed, and thus obviate the latter objection.

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IT is reported that a peculiar affection has appeared in

IT is reported that a peculiar affection has appeared in the glass windows of York Cathedral, England. The glass has become dull and fragile and filled with holes. Windows that have been in place for six or seven hundred years have lately been removed in order to arrest this curious form of deterioration. The trouble, which may properly be named a "disease," A Disease is ascribed to a fungus, but in what way it attacks glass is not yet definitely known. Possibly it dissolves the silica in order to form a shell such as those of the microscopic diatoms that make up the fine siliceous deposits found in Germany and other countries. Glass is not the only hard substance that may succumb to such attacks, for a species of bacteria is known to disintegrate the hardest cements, and has thus wrought havoc in water reservoirs.

THAT persons of abnormally great stature must also have abnormal strength and vitality is a common opinion. This is disproved by statistics recently collected, which show that a giant is usually a weakling, a monstrosity physically, and mentally inferior to an ordinary man.

Is Gigantic Stature

a Disease?

M. Meige, a French investigator, identifies gigantism with the diseased condition known to physicians as "acromegaly," (enlargement of extremities,) in which there is over-development of the hands, feet, and jaws, amounting to deformity, together with humpback. Gigantism, he says, is the earlier form of the disease, observed during the period of growth, while the other symptoms of deformity appear later. An acromegalic person is not necessarily an invalid, although such people are especially inclined to certain ailments; but, even so, it is clear that a child of rapid growth and great stature should be closely watched.

CONDENSED milk, in which the liquid is reduced to a creamy or pasty form, is a familiar substance. There have been numerous attempts to go farther, and to dry the

If the electric lamp is out of reach, inside a closed or high on the globe ceiling or over the diningroom table or in a lantern on the front porch, you can't take | hold of the bulb to turn down the light — you | can't use the wellknown standard HYLO turn-down lamp.

down from the family to

Our new pendant push button hanging the electric bulb by a conducting cord enables the shortest member of turn down the light.

Anybody can attach the push button to the special HYLO by means of snaps like a glove fastener. The cord can be any length. Extend it to your bed and turn the light up without getting up. One bulb will wear as long as three common electric bulbs and the push button will last indefinitely.

When you want to turn the light up and down

by means of the wall switchbut that is another ad.

LONG DISTANCE

Is the name of our new lamp. It is mailed complete on receipt of \$1.25. When the lamp finally wears out a new one to replace it will cost 60 cents. The cord and push button will last indefinitely. Cords are made two feet long unless otherwise ordered. Extra length cord 9 cents per foot additional. The cord and push button will not work with a common bulb but only with the Long Distance HYLO bulb.

If your electrician does not have the Long Distance HYLO in stock send your order to the factory direct. Write anyway and find out about all the ingenious lamps we make. "How to Read Your Electric Meter" sent free on request.

Push this in to turn light down.

THE PHELPS CO., 47 State Street,

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MICHIGAN.

SANDOW'S UNCONDITIONAL



Push this ic to turn light up.

N response to numerous requests I have decided to continue my present offer of a free course in physical culture to every subscriber to the Sandow's Magazine for 1903. I cordially invite every subscriber to test thoroughly and without cost the system which has proved its wonderful merits in bringing me from a sickly boyhood to a manhood of perfect health and physical power.

My system is perfect in every detail, is easily understood, and is as fascinating to the pupil, as it is beneficial, and you work with the knowledge that you are using that which has no equal or successful competitor. After a satisfactory test, I believe you will see the advisability of continuing with the course at a moderate outlay for my continued service; but I do not make this a condition of the trial course. This system, which has been my life work, and already of much benefit to thousands of others, I am willing to place freely in your hands to test thoroughly, with the confident belief that you will realize all and much more than I claim for it.

Sandow's Magazine during your will contain over One Thousands.

Sandow's Magazine during 1903 will contain over One Thousand Pages of the most authentic and interesting information on physical development, hygiene, and out-door recreation. The exercises sent you for a trial, covering three weeks work, will be made in strict conformity with your report, and will be forwarded to you by mail, without delay, in two sections—the second when you have reported on the first week's work.

on the first week's work.

Send sex, age, height, weight, vocation. The condition of your heart, lungs, stomach, and nerves.

During my extensive tour arranged for 1903, I shall admit all postal course pupils to my exhibition free of charge, and to this end shall provide every postal course piainly written, to

EUGEN SANDOW.

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The "Invincible"

is a most unique overcoat. The feature of this coat is the practically invisible vents in the sides directly under the armholes through which the wearer can reach the pockets of his coat or trousers in the easiest possible manner.

You can get the "INVINCIBLE" Overcoat ready-to-wear at any clothier's that sells

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Write us for further information, name of dealer in your town, and our collection "G" of fine half-tone reproductions of "Styles from Life" FREE.

MICHAELS, STERN & CO., Rochester, N.Y.

Michael Stern Va. Manufacturers

Facsimile of linen label sewn inside pockets of

Michaels-Stern Fine Clothing.



Have You Tried Them?

Perfect in fit, never ragged or uncomfortable. Very convenient, stylish, economical. Made of fine cloth and exactly resemble linen goods. Turn down collars are reversible and give double service

NO LAUNDRY WORK.

When soiled, discard. Ten collars or five pairs of cuffs, 28c. By mail, 30c. Send 6c. in U.S. stamps for sample collar or pair of cuffs. Name size and style. REVERSIBLE COLLAR CO., Dept. M, BOSTON.

milk to a solid, still retaining all its constituent elements, but the difficulty has always been that the necessary heat alters the chemical state of these elements, so that the resulting substance ceases to be milk. This objection has now been obviated, we are told, by a new process in which the milk is completely dried without ever being brought to the boiling point. Hot dry air is first forced through it, and when it has been condensed to paste it is agitated in warm, rotating drums until it becomes first a dough and then a solid mass. This is crushed to a coarse powder, and is said to keep excellently. It is used, like condensed milk, by adding water as desired.

A Mong the most striking results of modern investigation are those that show that metals and other masses of dead matter may be made to exhibit some of the characteristic phenomena of life, such as irritability, fatigue, and memory. In a recent book entitled "The Response of Matter," Dr. J. C. Bose, of Calcutta University, shows that metals not only give a very decided response to irritation of different kinds, but that this response is affected, as in organic beings, by the chemical action of drugs, being heightened by stimulants and depressed by poisons. The special form of irritability studied by Prof. Bose is response to electric waves, and he has succeeded in constructing what he calls "artificial sense-organs," in which he attempts to imitate the functions of the eye, the ear, and the tactile organs. By means of his "eye" apparatus he believes he has discovered some hitherto unnoticed phenomena of vision, so closely, in some respects, does its action correspond with that of sight.

A NEW device for locating beds of minerals has been invented by a California man who has utilized for this purpose the fact that gold, silver and copper are the three best conductors of electricity. Two rods are inserted in the ground to be tested, at a definite distance apart, and the electrical resistance between the two is measured by the usual methods. After a number of measurements, covering a fairly large area, the results are plotted on a map, and study of this gives a good idea of the ore beds of the region, if there are any. The depth of the deposit can also be approximately ascertained by moving the rods nearer and nearer until the fall of resistance due to the ore is no longer apparent. The deeper the bed, the sooner this occurs. It is claimed that this electric prospector will reduce to a minimum the amount of labor expended in searching for mineral deposits, and that it will in many cases substitute certainty for guesswork.

A TTEMPTS to combine stenography and typewriting have not been very successful hitherto, but it is claimed that the problem has now been solved by a Frenchman, M. Lafaurie, in a machine named by him, "the stenodactyl." In this machine, there are only ten keys, one for each finger, and the position of the fingers remains the same throughout the writing, the different sounds being written by depressing different combinations of keys. In this way, sixty-two sounds can be registered, which are found to be sufficient for phonetic writing. The left hand writes the consonants and the right hand the vowels and as the hands are employed simultaneously, each movement of the two writes a syllable. The speed is thus trebled, and an operator who can write seventy words a minute on an ordinary typewriter can do two-hundred words on the "stenodactyl." It is claimed that this type of instrument is destined to come in wide use and that it will practically solve the problem of a universal or international system of stenography.

IT has long been known that rats and mice play an important part in the dissemination of the bubonic plague. A French expert, M. Borel, asserts that the disease is spread practically by their agency alone, and on this theory he explains some hitherto mysterious facts in its propagation. Why, for instance, does the disease sally out, as it were, from permanent plague centers in China, in certain years only? Borel says that it is because in those years, the disease being more active, owing to favorable climatic conditions, it spreads into the surrounding country so that infected rats reach a river-port, whence they are conveyed in vessels to the coast. Why, again, does the plague sometimes break out violently in carefully quarantined placed to which it is certain that no infected person has been admitted? This is due to the fact, Borel maintains, that the rats are attacked at least a month before the first human case appears, and that an incoming vessel may therefore be allowed to land while she is full of plague-striken rodents, the disease not having spread to the passengers or the crew.

THAT our coal deposits are the result of bacterial action seems probable from the investigations of a French microscopist, B. Renault, who has devoted thirty years to a study of fossil microbes. Ile finds these in great quantities in all coal, and he believes that the transformation of plant tissue into the form in which we now find it in these deposits is largely due to their action. It has been generally supposed that peat and the different varieties of coal, hard and soft, are but successive stages in the same process of transformation, but, according to M. Renault, they are due to the action of different kinds of bacteria. The variety that determined the formation of hard coal is extinct, and hence we need not expect any more to be formed. The decomposition of woody tissue in the marshes of to-day gives us only peat. This theory appears to accord with the results of laboratory experiments, for all attempts to change peat artificially into coal by means of heat and pressure have hitherto been failures.

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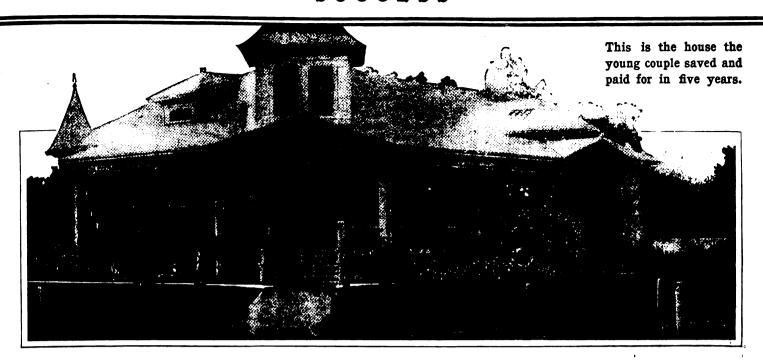
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How to Form a Boys' Club

HERBERT HUNGERFORD

IT is needless to give proofs to convince those interested in the welfare of boys that the club idea is attractive. You need only to make inquiries among the boys you know and you will find that there is not one in ten who does not belong to some kind of club. You will be apt to discover, however, that some of these clubs are not altogether to be commended, especially if some of the boys of your acquaintance happen to live in the poorer sections of a large city. For instance, a boy might tell you that he belongs to the "High Flyers Club" or the "Hot Time Association," which will probably turn out to be one of those pernicious social clubs so numerous in all large cities.

of those pernicious social clubs so numerous in an large cities.

Some clubs are not worth while, not because of the harm they do, but because they fail to accomplish much good. Of such are the "goody-goody" clubs and the "fad" clubs. The latter are formed by men and women with large intellects and spectacles. Their object is not so much to help a boy as it is to study him and classify his traits and characteristics for some long treatise on the wonderful science of "boyology." The "goody-goody" clubs are formed by those misguided individuals who are always trying to fit round pegs to square holes. The object of the "goody-goody" clubs is the production of model boys. An average boy has an idea that a model boy is one of those who grow up to be lions at "pink-tea" parties.

An Ideal Boys' Club

In the foregoing two extremes there have been noted the club that is to be avoided because of its objections and the club that is to be avoided because of its goodness. An ideal boys' club is a medium between these two extremes. It must have enough of the good element to make it worth while, and enough of the strenuous element to make it attractive.

while, and enough of the strenuous element to make it attractive.

Activity is the keynote of ideal boys' clubs. The boys must be given an opportunity to work off their excessive animal spirits, therefore gymnastics and athletic games should be made prominent. Handicraft is another prominent feature. In boyhood, the jackknife is mightier the either the pen or the sword. If a club cannot afford oufits of tools and machines, it surely can hold whittling parties with prizes for the boys who exhibit the most skill in the use of their jackknives. If any money can be spent in a boys'-club equipment, it should be invested in a printing press. There is a fascination about printing that is irresistable to an average boy, and nothing will prove more useful in advertising and in extending the benefits of a club. Government is another point of interest. Boys like to make laws, to elect officers, and to conduct affairs. With discreet suggestions on the part of the superintendent, an average club will govern itself satisfactorily. It will be wise, however, for the superintendent to always act as the supreme judge.

The literary work of a boys' club whose members average less than fifteen years of age should be confined to occasional debates on questions of simple ethics or of easy political subjects, common-sense talks by interesting adults, and, once in a while, an essay or declamation contest.

How to Organize a Boys' Club

How to Organize a Boys' Club

The difficulty in boys' club work lies in finding competent superintendents. It is important that the director of a boys' club should be sympathetic and judicious. He or she must also understand boys, and must have great patience and a highly developed sense of humor, for, above all else, the average boy enjoys fun. Having found the right kind of director, the organizing of the club is easy. Simply let the boys know that a club is to be organized in which they can have good, wholesome amusement, and you will have no trouble in the matter of membership. There is no way in which a pastor can get nearer to his boys than through the club plan. The Success Club Bureau will be glad either to assist anyone interested in organizing a new club, or to help conduct clubs already organized. A quantity of printed matter about boys' clubs will be sent on request. Please state the average age of the boys you wish to interest.

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To federate for mutual helpfulness all self-improvement societies, such as social, debating, literary, athletic, and self-culture clubs. Any self-improvement club may join the League by passing a resolution of affiliation.

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The government of the League is purely democratic. Officers are elected and all by -laws enacted by popular vote. The function of the League officers is advisory only, thus making each branch club self-governing and independent of central control. No dues or fees are levied by the central Bureau, which is supported entirely by Success.

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THERE is a twofold object in the contests named below. Of course the chief aim is to offer some prize contests that will be thoroughly inter-esting to boys and girls, but we have a secondary end in view; namely, to find out the comparative interests of our readers. We want to know how many young members of the Success family are interested in stamp collecting, amateur photography, drawing, and puzzles. We expect to discover this by the interest shown in the contests, so we would advise any young readers who are interested in any of these things, and who would like to have Success give space to them, to be sure to enter the contests, even though they may not do so for the prizes alone.

What Do Our Young Readers Want?

The editor recognizes that the younger members of the SUCCESS family are entitled to some space in each issue, but he has not decided on what to put into it, or how to present it. What would you do if you were editor of SUCCESS? Would you have a separate department, or scatter juvenile matter through the magazine? Would you have pictures and jingles, as a rule, or stories and descriptive articles? Would you have many short articles, or one or two long ones? What kind of stories is best? If you wouldn't do any of these things, what would you do? Your ideas will help to influence the conduct of this department, and they may win you a prize. Articles must not be more than five hundred words in length.

Why I Enjoyed the Book

If you have read a particularly interesting book recently, tell us, in not more than one hundred words, why you liked it. Give the exact title of the book and the names of its author and its publisher. The best-written articles, giving the best reasons will win the prizes. This contest will help us select good books for review and recommendation in a future book department.

Can You Draw Pictures of Animals?

Can you draw a really life-like picture of a horse, a dog, a cow, a hen, a woodchuck, or any other animal? It is not easy to do, but SUCCESS boys and girls are not looking for easy things. Make your drawings on white drawing paper or bristol board, using black ink or water color. Only black should be used. The drawings should be about ten or twelve inches souare. or twelve inches square.

A Photograph of My Room

This is just the season for taking interior views. Of course, almost every amateur has already taken a dozen or more views of his room. Pick out your best picture and enter it in this contest, or, if you think best, take a new view especially for the contest. Wrap your unmounted prints securely so that they will not be creased in mailing. No views smaller than two by three inches will be entered in the contest. The artistic arrangement of the rooms, as well as the excellence of the photographs, will be considered in awarding the prizes.

Why I Collect Stamps

If you are a "stamp fiend," can you tell in three hundred words the "method in your madness,"—what is interesting in the hobby, and what benefit you get from it? Try it, and you may win one of the prizes.

Puzzles That Really Puzzle

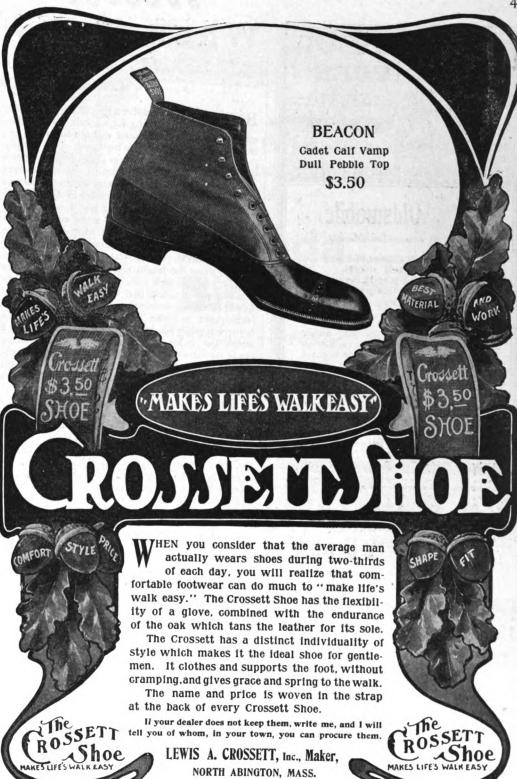
Do you know any puzzles that are really puzzling,—actual brain teasers? There are plenty of nonsensical ones, but we want those only that are first-class, bright, and unusual. If you know any good ones, send them in, fully described. We want to learn, by this contest, what kind of puzzles our readers like best.

Rules of the Junior Contests

All readers of SUCCESS under twenty years of age are invited to take part in these contests. All articles should be carefully written on one side of the paper only, and should be mailed on or before January 20, 1903. Contestants who do not obey these rules will not be considered in awarding prizes. awarding prizes.

awarding prizes.

Address, Youths' Contest Department, Success, Washington Square, New York City.







When Betty Entertained

IV .- A New Year's Breakfast CHRISTINE TERHUNE HERRICK



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BETTY had sternly resolved that she would call a truce to entertaining for a while after Christmas, but she had reckoned without her host; or, in other words, without her husband. Jack, having lived in a boarding house for years, debarred from the joys of exercising hospitality, was like a tiger that has tasted blood: he reveled at having friends at his table, and, if it had been left to him, would probably have had two dinner parties a week

Against such extravagance Betty set her face. She finally compromised with him on one little dinner a fortnight and someone at supper Sunday night. This, of course, was not to include any chance guest he might pick up on his way home to take potluck with him. Betty had known, before she was married, that this sort of thing was to be expected, and wisely thought that it was of chief importance to make her husband feel that his home was really his, instead of being merely a place where he could eat and sleep, and for which he could pay the bills. So she welcomed the unexpected diner when he came, and served him with what they had without apology. After all, it was Jack who had to pay the housekeeping expenses, and, if he found more pleasure in putting money into hospitality than in spending it in other forms of amusement, she felt that she had no right to protest. Indeed, she had no inclination to object, for hospitality was a failing of her own which was limited only by her sense that she must practice economy for both her husband and herself, if they were to put away a little money, from time to time, against a rainy day.

A Little Breakfast for a Few Old Friends

She looked rather serious when, a day or two after Christmas, Jack said something about having a New Year's frolic.

"Do you really think we ought to spend any more money for entertaining, just now, Jack?" she asked. "Thanksgiving and Christmas cost so much that I thought, perhaps, we would live quietly for a little while."
"Well, dear," he said, awkwardly, "the truth is,

I said something to some of the boys about coming here on New Year's Day. You know it will be the first New Year we shall pass in our own home, and I thought it would be rather jolly to have just a few persons in, —that is, unless you mind very much."
"Oh, of course, I don't mind in one way," an-

swered Betty, slowly. "How many people have you asked?"

"Only two or three: Reamer and Fullerton, and I believe I said something about it to Thurston."
He continued, rather anxiously: "Will it be too
much trouble? Will it give you much extra work?"

"It is n't the work that I am thinking of," said Betty, "and, of course, we can manage it. Only, after this, dear, we must shut down a little on company for the rest of the month; and you won't mind if we manage this affair a little economically,

"Oh, that will be all right," said Jack, cheer-

fully. "I know whatever you do will be all right."
"What would you think of a breakfast party?"
asked Betty. "I have been planning, for some time, to give one, and this will be as good a chance as any.

"I never went to one," said Jack, "but I don't doubt it will be a very superior article."

A Kidney Omelet that Was Palatable

Betty had her own misgivings as to the matter, but she kept them to herself. She felt that, if she should give a really pretty breakfast, it would be expensive, and that, if she should reduce its cost, it would not be nice. She made up her mind, however, that she would do the best she could, and, if possible, keep the expenditure within the limits of a five-dollar bill. As she had decided to invite three girls in order to offset the three men Jack had asked, she felt that her work was cut out for her.

Her bill of fare was the first consideration, and to it she gave much time and thought, which were to take the place of money, as far as possible. When the menu was finally adjusted, it read so well that Betty was mightily cheered and only hoped the meal would be as satisfactory when on the table as it was on paper.

She would begin with grape fruit. She could

buy two for a quarter, and half a one would be served to each guest. The cost of the first course would be fifty cents.

The next course, she decided, should be a kidney omelet. Ellen had learned how to make an om-elet "to the queen's taste," as Jack said, and this was exceptionally savory. Four lambs' kidneys, that cost ten cents, were enough for this. The kidneys were to be sliced and fried for five minutes in a tablespoonful of butter, then mixed with a sauce made by cooking together a tablespoonful of browned flour with one of chopped parsley, one of Worcestershire sauce, and a cupful of beef stock. When this was thick the kidneys were added to it, and the mixture was folded into the omelet. For a party of eight a ten-egg omelet would be needed, and eggs were thirty-five cents a dozen. The second course cost forty-five cents already,—fifty, perhaps, allowing for stock, condi-ments, and butter. With it, Betty served bread and butter cut very thin.

Keeping Within the Pale of Economy

The real struggle came with the third course. For this she must have something a little solid, and she wavered a long time between chicken and chops. Finally, she decided on the former. Chops were an everyday matter and she had a new recipe she was pining to try. Generally, she held fast to the principle of always testing a recipe by herself before she attempted it for guests, but she had done so much cooking of late that she had gained confidence in herself, and was sure that this would come out all right. So she ordered a pair of broilers, for which she paid a dollar and a quarter, and turned her next thought to the salad. This was to be a comparatively simple affair,—tomatoes stuffed with celery and English walnuts, and eaten with crackers. The tomatoes and the celery together amounted to fifty cents.

Should there or should there not be a sweet course? Betty deliberated for a long time. She felt that sweets were as much out of place at a breakfast as soup. Finally, she compromised on fruit. True, the breakfast was to begin with that, but the last course should be of grapes of various kinds, and there was little resemblance between them and the fruit to be first served. A dollar would pay for enough to make a very pretty dish, and Betty made a computation of the amount she had mentally expended. As the first course would cost fifty cents, she would be safe and allow fifty for the second. The third course would be a dollar and a quarter as it stood, fifty cents for the salad, a dollar for the fruit,—three dollars and seventy-five cents altogether. The coffee was to be allowed for, and the "trimmings" of various sorts, but she was so well within her ultimatum that she promptly decided to have a loaf of Sally Lunn to go with the chicken as well as the fried hominy she had planned to have accompany it.

How Betty Made a Loaf of Sally Lunn

Very little of the preparation could be done before the day of the breakfast, and, as the meal was to be served at half past twelve, Betty saw that she would have a busy day of it. The night before she made out a list of the china she would use, and had most of it dusted and arranged on the sideboard before she went to bed.

She was up very early New Year's morning, in order to prepare the loaf of Sally Lunn that was to grace the board. Betty prided herself on her Sally Lunn. It was one of the things she had learned to make at home, when a girl.

First she beat four eggs very light and stirred into them a cupful of warm water and one of warm milk. To this she added a teaspoonful of salt and a half teaspoonful of soda, and then half a cupful of melted butter. She sifted a quart of flour into a bowl, poured the mixture upon it, and then beat in half a cake of yeast, dissolved in a third of a cup of warm water. This batter she whipped hard for five minutes and turned it into a well greased mold,—one with a tube in the middle. She then set the pan in a warm place that the contents might rise. This process usually demanded six hours, but there were times when Betty, as she used to say, "hurried Providence." This she did by putting the loaf in a very warm corner, where, in between four and five hours, it would swell to the

proper bulk and be ready for placing in the oven. Beautiful flowers made the table so very attractive that Betty had to stop her work every few minutes to enjoy their fragrance. As it was the breakfast table, she had decided not to have the board bare, but to cover it with one of her pretty new breakfast cloths. They had been among her wedding gifts and had napkins and doilies to match. For a centerpiece she had a round of convent embroidery in pure white, and on this the deep red of the roses showed to advantage.

The grape fruit was to be on the table when the guests should come in, and, as finger bowls would be needed for both the first and the last courses, Betty determined to leave them on the table throughout the meal. It would simplify the work of serving, and this was a consideration when there was only one servant. A doily was put under each finger bowl as it was placed between the guest's cover and the middle of the table. A salt and a pepper cruet were between every two places, and for each guest were three forks, two knives,—one small, for butter, the other large, for cutting, and a spoon for the grape fruit. The napkin was laid at the left of the plate with the forks, while the knives and the spoon were on the right. At the point of these latter was the tumbler, and near that was the bread-and-butter plate on which were a butter-ball and a roll.

A Dainty Way to Prepare Grape Fruit

As the coffee was to be served in large cups with the second course, Betty had the equipment for this put at her end of the table. A tall urn that had been a family possession for years was in front of her, and the cream and hot milk were respectively in a small jug and a larger one. The cups were spread out before her in imposing array. The dish of grapes was on the sideboard, ready to be served.

After the table was set Betty went to work to prepare the grape fruit, halving each one, cutting the edges of each half into little points, removing the hard core and loosening the fruit from the inner skin that it might come away easily at the touch of a spoon. The fruit was then put on the ice, for the sugar was not to be added to it until about five minutes before it was served.

The making of the salad was more tedious than difficult. The tomatoes had to be peeled, the tops taken off, and enough of the inside scooped out to leave space for the celery. To this were added English walnuts,—the kernels of a dozen of these chopped and put with a cupful of minced celery. With this mayonnaise dressing was mixed, and a teaspoonful of the dressing was to go on top of each

tomato just before serving.

Betty jointed the chicken and then laid the pieces in a marinade of two tablespoonfuls of oil, fifteen drops of onion juice, and the juice of a lemon. They lay in this for half an hour, Betty lemon. turning the pieces from time to time. took them out, dusted them with salt and pepper, and fried them in salad oil. They were to be sautéd,—not really fried,—and the process took nearly three-quarters of an hour. Betty covered them, put them at one side of the stove and charged Ellen to watch them while she went upstairs to dress.

Finally, a Gravy for the Chicken

When she came downstairs half an hour later she popped her Sally Lunn into the oven, saw that the slices of boiled hominy that Ellen was frying were reaching the right shade of brown, and gave the coffee a glance. The chicken was ready by this time, and Betty, covered with a big apron to protect her pretty gown, lifted the pieces from the pan and put them into a hot dish. She set this where it would keep warm without drying out, and to two tablespoonfuls of flour added two tablespoonfuls of fat strained from the pan. These she cooked together until smooth, and then put in a pinch each of salt and paprika, and a dash of pepper, and poured in a cupful of milk and half a cupful of cream. When the mixture was smooth and thick she placed it at the side of the stove in a double boiler, and told Ellen to add to it a teaspoonful of chopped parsley just before she poured it over the chicken. The fried hominy was to be laid around the chicken on the platter.

Betty had made Sally Lunn often enough before

to know it was safe to trust it to Ellen's care. She would know when it was done,—it required about three-quarters of an hour's baking,—and could turn it out. So she went gayly upstairs, sure that all would be a success and happy in the thought that she had arranged a creditable meal without

over-extravagance.





HEALTH, BEAUTY AND A GOOD FIGURE.

I do not THINK I can give you these priceless gifts-KNOW.

I do not THINK I can give you these priceless gifts—I KNOW.

I have given them to 5.000 women by teaching them the simple laws of Nature. Give me 15 minutes of your time each day for six weeks and I will give you not only freedom from suffering, but make your life a joy, your work a pleasure perfect. I will give you individually exactly what you need to build up, fill out or reduce your figure to graceful, symmetrical proportions and secure for you a fine carriage. I will give you poise—mental, moral, vital—perfect self-possession, clear brain, quick perception, winning manner. These are the gifts of perfect health and perfect knowledge of yourself.

Fifteen minutes a day is no tax on any person's time or patience and for it you may have bounding life in your veins, fine color, bright eyes—happiness. I know woman's needs and troubles through 12 years' experience in helping them. I have yet to find one whom I cannot benefit. I undertook my work by mail because I succeeded so well in personal work, and the benefits which my pupils have received have been more and greater than I even dared to hope.

Remember, my work is physical culture—not mere muscular exercise. You want something which reaches causes; you want something for your own special need. I have made so many women thankful and happy, I shall be glad to help you also. Men cannot do this work for women. They do not understand our conditions nor limitations.

Write and tell me your needs, and for ten cents in stamps to cover the mere

Write and tell me your needs, and for ten cents in stamps to cover the mere expense of paper and postage, I shall be pleased to send you an instructive and interesting booklet, letters from my pupils, and a card for your dressing-table showing the correct lines of the woman's figure in poise and movement.

Yours for a body expressing perfect health, perfect grace and perfect woman

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Miss Cocroft is President of the Physical Culture Extension Work in America. She needs no further introduction to the Public.



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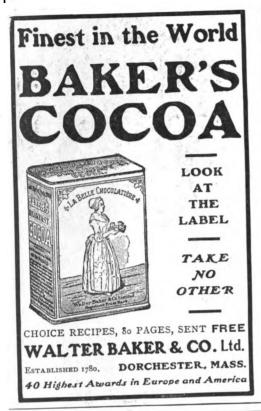
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[The editor of Success is constantly asked for advice by various persons and by letters from many readers. So many letters come that it is impossible to answer them all personally. Many of them cover the same ground. Sometimes it is difficult to be frank enough in criticising a person to his face. The editor wishes, therefore, in this department, to give advice and counsel which shall be direct and helpful, and to make the answers broad enough to apply to many cases, though a single person and his needs are in view.]

Little Things Are Killing Your Business

Little Things Are Killing Your Business

While you are wondering why you do not get on faster, why your business does not grow and improve, like your competitor's, when you work just as hard, he sees scores of little things, that you do not notice, which are keeping you down.

You wonder, for example, why you get so few customers, though your store is more attractive than that of your rival, who has double your trade. He knows, however, that many of your employees, office boys, cash boys, and clerks, are driving away business through their indifference, coarseness, and rudeness. He notices that your clerks are impudent and gruff; that they do not take enough pains; that they are not accommodating, and hence are repelling customers. He insists upon absolute politeness and strictest attention and accommodation, down to the last detail, from his employees. He knows that, even if a clerk does not feel quite well, he should not show it to his customer, or he may spoil a sale.

You are not careful or exacting enough in the choice of your employees. You do not discriminate enough between the special qualities that are required for a floor-walker and those needed in the heads of departments. You set people to doing things for which they are in no way fitted.

You are carrying a load of old styles, "passé" goods, that should have been marked down, and sold at any price, rather than have been carried over. A reputation for being up-to-date and progressive, and of having the newest designs and styles, is important, especially for a young business man, and if you are catering to women's trade. We know some concerns in New York City that are dying of "dry rot" because of bad judgment in buying. Women very quickly find out the store which has the best and most tasteful buyers.

This is true not only in the dry-goods business, but also in every other line. People like to be sure that, when they are buying anything they are articled to a store that, when

very quickly find out the store which has the best and most tasteful buyers.

This is true not only in the dry-goods business, but also in every other line. People like to be sure that, when they are buying anything, they are getting the best and the newest. When a man purchases a hat, for instance, he wants to know that it is of a style that will be generally worn. He does not wish to be obliged to ask if it is old in style. He takes it for granted that, if you have it on sale, it is the newest model. The same is true of every article of clothing. Young men and young women of limited means who are anxious to be in style cannot afford to buy things which are out of date.

One reason for your lack of success is that you do not keep your goods in proper order. Your departments are in confusion. Your store is not clean, your windows not properly dressed. It is not enough to put goods in the window: they must be properly arranged, and you must show taste and order, and originality in design. A well-dressed window is a great advertisement. The fact that you are conscious that you have, in the basement, or on the shelf, better goods than your competitor's, does not always count, if your window does not make a good impression.

Shrewd proprietors of large establishments know very well that an efficient and capable window-dresser, though he be high-priced, is an essential part of the business; and, while your trade may not warrant a high-priced man for this alone, yet you can develop taste among your employees, especially among the young women, and, by thought and pains, you can make a good showing.

Was It Worth the Fearful Price?

Yes, my friend, you have succeeded in business, I must admit. You have got your million, but what has it cost you? What have you left? A bent, stooping form; a hard, haggard face, chiseled by years of grasping, elbowing, crowding your way through the business world.

You have your million, but where are the open, cheerful countenance, the regal expression, the bewitching smile, the bright, sparkling eye, the elastic step, and the manly bearing that once were yours?

You have exchanged a bright, cheerful, happy home for a neglected family and wife and children who seldom see you and never really feel happy with you. Selfishness and greed have taken the place of loving service; hurry and haste and "no time" seem to absorb everything of home life. How many times during all these years has your wife regretted your passion for wealth, your determination to be a millionaire? Does she think it has paid? Do your children think the game is worth the candle?

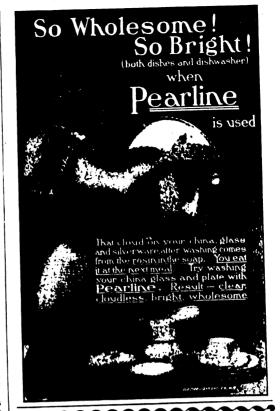
Did it pay you to sacrifice your friendships, to give up those near and dear to you, and to feel that your early associations have all been severed for a great piling up of dollars? Does your prematurely old and bent body, filled with rheumatism and aged by dyspepsia from hurried luncheons and half-digested meals, pay?

What have you to show for your million? Does your stunted, half-starved brain, with its half-developed faculties, think it has paid? Does your warped and twisted life answer in the affirmative? What does your starved and shriveled soul, which has lived on spiritual husks for half a century, think of the bargain? What does your starved and shriveled soul, which has lived on spiritual husks for half a century, think of the pargain? What does your dwarfed manhood, your crippled ambition, your stifled aim, think of the exchange?

Finally, what do you, yourself, think of the exchange?

The exchange?

Finally, what do you, yourself, think of the exchange?
Have you lived to regret it, or are you satisfied with your
Midas-like touch that turns everything that is best in life
into dollars?



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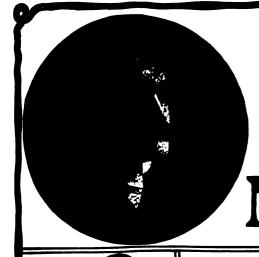
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THE STONE ETHO





orrect poise, with head up, shoulders
uck, chest arched and leading, and
domen repressed. Afigure and bear
g which is possible for every woman
ho will exercise 10 minutes daily.



A flat, narrow chest, of limited lung capacity. The shoulders fall listlessly forward and the abdomen is promi-nent. See opposite

If you knew—beyond the shadow of a doubt—that The Stone Method

would restore you to sound, robust health—you would investigate it, wouldn't you?

If you knew—positively—that **The Stone Method** would give you a fine, strong, well-developed physique, which bears every evidence of perfect manhood or womanhood—you would write us for detailed information, wouldn't you?

If you knew—to a certainty—that by following our instructions 10 minutes daily you could secure a pair of sound, easy-working lungs, with plenty of room in which to expand—a splendid circulation that would make itself known in a ruddy complexion—good digestion—sound, restful sleep—an active liver—an increased appetite—bright eyes a clear brain—a light step—an erect carriage—you would do it, would you?

This is what we have to offer:

Women receive just as

much benefit from The

Stone Method as men, but no woman desires the

A system of exercise which requires no apparatus whatever, and only ten minutes time each day, in your own room, just before retiring. It does not overtax the heart.

retiring. It does not overtax the heart.

Nearly everybody needs what we have to offer. Not one person in a hundred gets all there is out of life. They don't know what it means to be strong, healthy, robust—to feel good all the time.

It is not our purpose to develop abnormal muscles, but rather to impart greater strength,

round out the physique, correct chronic complaints and insure a greater measure of life in general.

Such results can hardly be measured in dollars and cents.

but no woman desires the same muscular development which she admires in men. This makes who pay special attention to women and no difference, because individual instruction is children. Mrs. Ellen Walker has charge of given in every case.

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this department. She has had a very extensive experience, and she alone opens and answers

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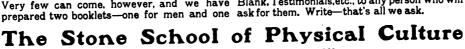
sour will get your money instanter. We know that in 99 cases out of 100 THE STONE METHOD will produce results which are simply assood will of the 100th man than his money.

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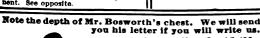
The Stone Method in detail, our plan of mail instruction, etc. These booklets contain many photos from life, showing what others have ac-

for women - which

Stone Method to those who wish to better their conditions physically. If you could come to our office, we would convince you in five minutes that we have just what you need Very few can come, however, and we have prepared two booklets—one for men and one snowing what others have accomplished—what you may accomplish if you will. They will prove interesting whether you wish to take instruction or not. We will gladly send them FREE together with Measurement Blank. Testimonials, etc., to any person who will ask for them. Write—that's all we ask.



1649 Masonic Temple, Chicago, Ill.



Mr. Bosworth's chest. We will send you his letter if you will write us. Beatrice, Neb., Oct. 15, '02. I have followed your instructions faithfully and have realized a good gain in weight. I also have much more power of endurance and greater vitality. The rapid development without apparatus is a surprise. I exercise only 10 minutes a day and the results so far have been greater than I expected. My chest expansion has increased wonderfully, and to put it mildly I am more than satisfied in every respect. I believe that there are thousands who are suffering with chronic complaints who could be cured without medicine by simply following your instructions. I know that The Stone Method has done wonders for me and I can heartily recommend The Stone School to those who wish to regain their health and to those who are blessed with good health, but want to improve the physique. I know whereof I speak. My muscles are firmer and I have a robust constitution generally. G. A. BOSWORTH,



When I took up your course, less than two months ago, I had become a nervous dyspeptic. What little muscle I possessed was soft and "flabby" and my breathing was very poor. I tried several physicians but found no relef. Finally I decided to try physical culture as a last resort. Every muscle seems to have doubled in strength. When you consider my weight was 140 pounds and height 6 ft. I in. you may know that I was a hard subject to improve. I heartily recommend your system to anyone who wishes to improve his physical condition.

Leesburg, Ohio, Dec. 7th, 1901. VASCO V. SMITH.

Mr. Hundley is an authority on physical culture. We will send you his complete letter if send you you desire.

send you his complete letter if you desire.

Cedarville, O., Nov. 13, '01.

It is with pleasure that I give my testimonial extolling The Stone Method of physiological exercise. Being a writer on the subject of athletics and physical culture, and having investigated all the much advertised systems, I cannot lay too strong of health and muscle-building is superior by big odds to them all.

I have been using your system less than two months, and, tho' I was in fairly good condition previously, can truthfully say results derived have been little less than marvelous. My muscles are supple and when tense are more like bone than anything else I can compare them to; my digestive organs are vastly improved; my mind is clearer and my capacity for work has doubled—all this in less than, eight weeks. A year's time, I feel sure, will make me what God intended all men should be.





Well arched chest, of good lung capa-city. Shows how condition opposite may be remedied by proper physical and breathing exercises.



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The Finishing Touches In Dress GRACE MARGARET GOULD

IT is the first impression that counts.
Man always has and always will judge by

appearances. Manner and dress alike are passwords to success. Effectiveness, however, is a matter of taste. Wealth cannot buy it, nor need a scant purse be a bar

to it.

As the young wo man is, so she will appear. This individuality, so essential, depends largely, if not altogether, upon little dress accessories accentuating, and harmonizing with the character of the wearer.

The conclusion formed from one's appearance is both direct and binding. The girl



Effects in chamois skin

who appears neat, well set up, and trim, gives an impression of being apt and clever. The frowsy coiffure, and the shoe run down at the heel, alike reveal a fatal defect. She who is slovenly in dress will be careless in business, and to appear well is woman's first duty. Successful women, then, in themselves bear the marks and proofs of their success.

What then are some of the accessories that the newest fashions offer to women striving for success in life? They are many in number,—they are great in variety, - small in themselves, yet very often they make or mar the tout ensemble.

Take your collar, for instance. If correctly chosen, it gives a distinctive touch, a new charm, frequently, to an otherwise hopelessly conventional waist. There is something novel and fetching about the new chamois collar, though it is just plain, ordinary chamois to start with; yet, when completed, it looks like some dainty imported novelty and still it is only, after all, the chamois with which we clean windows. The collar is in the fashionable clerical shape with the tabs in front. Of course, it is embroidered,—everything is, this season, -and as the fruit designs are the newest, it is embroidered in cherries in their natural shade of red which contrasts effectively with the pale yellow tint of the chamois. With a collar of this sort, chamois cuffs are also worn, embroidered with clusters of cherries. A belt can be made to match,—a narrow belt of chamois with the cherries embroidered upon it all the way round. The chamois set, consisting of collar, cuffs, and belt, gives just the touch that finishes a brown corduroy or green flannel shirt-waist.

A girl who looks the part she plays,—that of a successful young business woman,—recently designed for herself not only collar, cuffs, and belt of chamois, but a chamois hat; though it was home-made, no one could detect it. The chamois was carefully drawn over a buckram frame becoming in shape, -a narrow band of sable accentuated the edge of the slightly rolled brim, and clusters of cherries, which looked good enough to eat, were grouped up close to the crown at the left side of the hat and toward the front. A chamois hat with its brim faced with fur is another millinery novelty of the season. Chamois and ermine look

Fob and belt of Indian beads

well when combined for a dress hat, and chamois and mink, stone marten, or squirrel make a hat suitable for almost any occasion.

A few years ago no one could have imagined such a thing as fruit being dominant idea the of the smartest fashions,—yet, to-day, it is fruit,—fruit everywhere-in coats, hats, gowns, separate waists, and even veils.





The Ideal Health and Comfort Garment for EVERY WOMAN

Gently supports the bust and braces the back. Retains weight of clothing; removes all pressure from waist and stomach. Produces an artistic contour. Allows

Full and Deep Breathing

Assists Nature in Creating and Retaining a VENUS FORM. Used in Negligee, Delsarte, Physical Culture, Athletics, Maternity, and for all wear which does not demand corsets.

Maternity, and for all water the condemand corsets.

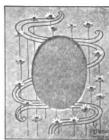
No steels or stays. Light, pillable and dainty. Ideal for comfort.

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Excels last year's book. Embroiderers said that book was "worth dollars" to them. 10 cents pays for book and postage. STAMPED PHOTO LINEN given FREE. You are sure to order this book, sooner or later.

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gowned girl is always very particular in adjusting her veil. If it is a delicate complexion veil she puts it on first, her hat afterwards, and arranges it carefully over her hair. As a rule it does not cover her mouth, but ends just below her nose. If it is the grape veil that she is wearing, she fastens it at the back with a dainty veil pin in the form of a miniature bunch of grapes. These novel pins can be bought showing a tiny cluster of white grapes, deep purplish blue, or grapes with a silvery tinge.

There is a practical muff this year for the upto-date business girl, which is quite as charming as it is convenient. It is called a pouch-muff and the novelty of it lies in the fact that it furnishes

a place for everything with everything in its place. The muff is big, as all fashionable muffs are this vear. It is generally made of black velvet, but whether it is made of velvet or fur, it has at the back a large roomy pouch where small packages, purse and notebook may be kept out of sight. The packages that are slipped in the pouchmuff stay there, while. heretofore, any little parcels that may have been carried in a muff have been in grave danger of being lost. Black bog-wood beads in various designs form quite the



A pouch-muff

smartest muff chain of the moment, especially when the muff is made of black velvet.

The modish young woman of to-day is still borrowing from her brother. Now it is his watch-fob that she has appropriated for her own special The very latest fob which she is wearing may be mannish, but it is mannish of the aboriginal It goes back to the wigwam of the Indian and is a selection of the best work in beads. Genuine Indian beads are used and they can be bought in bunches for five cents a bunch in a variety of gay and somber colors. The clever girl, of course, makes her own bead fob and she has a belt to match, too. The very smartest of the beaded belts have a canvas foundation and

fasten in front with a dull silver buckle in the form of an Indian's head.

It is economy for a girl with a limited income, to have in her wardrobe one fur collarette. If she selects it with care and good judgment, she will find it invaluable. The transforming possibilities of a squirrel collarette combined with creamy lace are many. The lace gives it just the dressy touch necessary, so that when worn to a theater even over a distinctly plain business gown, the effect is iust what the wearer would wish.



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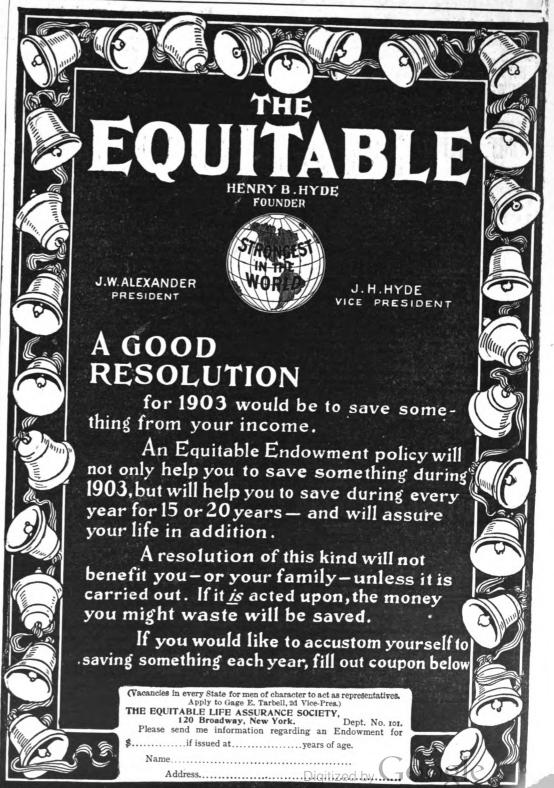
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PEADEE'S TOOTHPICKS

Joseph Blethen

[Continued from page 6]



It soon became a wilderness of monster logs

of the train is reached. Thus each log is a long car. The weight of the logs on their trucks is suffi-

cient to hold things together unless an ambitious conductor endeavors to haul too long a train. Then a log will pull off a truck, and must either be abandoned in the ditch or be raised by jack-screws and replaced on the trucks. The longer the log, the heavier it is and the harder for the truck to turn under it on a curve; hence, the longer the log, the more danger there is of a truck being

twisted off the track on a curve.

Chinn's order for twenty "toothpicks" to be felled and loaded each day set a killing pace for the camps, but each foreman was supplied with all the men he asked, and the first sun to rise after the order saw the battle open, and its setting saw twenty "toothpicks" in the boom beside the mill, Men were wearied to the point of agony, machinery had groaned under its strain, the equipment had shrieked under the great loads, and foremen and conductors went to troubled beds half crazed at the pace that had been set them and doubtful if they could hold it another day. But repetition allows the mind to calm. The second day heard men groan and machinery shriek, but between the groans there was the jest of returning courage, and between the shrieks the engineers boasted cheerfully that their engines could "jerk out more timber than Peadee ever saw an' never bust a cog!' On the third day the crews found time to compare notes on the situation, and on the fourth the success of the contract was predicted. On the fifth, Harris's train of ten logs pulled apart, carried him to the ditch, broke his leg, and gave Bannon his first chance to put in overtime. On the sixth day Bannon was ordered to take charge of the fore-noon run, and a new man was promoted to the afternoon train.

Sobered by the first wreck, the system rallied to the attack on the "toothpicks," ran more slowly around curves, ar 'spent more time in examining trucks and renewing brake-shoes. Ten working days passed,—twenty,—thirty; then the order came for the "toothpick" trains to make extra trips on alternate days, since Chinn's picked men were chopping twenty-five long sticks each day, and Bixby's head man was prancing around and demanding more trouble for his big saw. Out of the six hundred "toothpicks" delivered to the mill in the first thirty days of work, an even hundred had proved faulty, and had been cut up for general stock. Five hundred sticks, straight and true, had been loaded on ships. If the good luck should continue, the contract would be completed in sixty days. But thirty working days meant five Sundays on which nothing was done, yet the five idle days were five precious ones marked off the calendar and charged against the time limit of the contract. Thus sixty working days would carry ten Sundays with them; that would mean seventy days gone under the contract, with but five days margin for breakdowns.

Conductor Bannon had begun to feel an enthusiasm in the contract before the order came for the extra trips. He took it as a compliment that the first extra run was allotted to him. He had worked hard, and more than once his heart had stood still as a truck threatened to leave a curve, or a log slipped on a truck. That everybody and every thing on the system were working close to the limit of endurance he knew, yet he was ready to work

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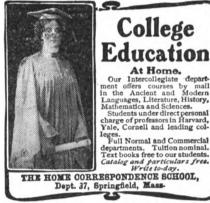
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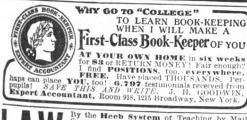
SUCCESS

even harder. He went up the line for the first extra trip, worked the loads down on the main line, reported himself ready, and received word that the









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line was open. Then Conductor Bannon mounted a truck, and stood musing as "500" began to ease her load of ten "toothpicks" down the grade. He felt the cool night air, and sensed the unreality of the dim September night. The trucks seemed to run less noisily than by day. The wheels seemed to com-plain less of their load. He fell to wondering whether the opportunity which had come so un-expectedly would be a fleeting dream, or would prove as solid as the great "toothpick" on which he leaned,—solid enough to keep the name "Ban-

non' on the list of conductors when the contract was filled; solid enough to warrant a leave of absence in the fall,—a leave with transportation for two down to Seattle, with a shower of rice when the train should start, and a cozy cottage ready for them when they-

A shriek of metal grinding on metal! A crunchoff its truck and struck the roadbed! A leap in the dark by a startled man! A scramble up a bank! A hasty look back, and Conductor Bannon saw that a truck had twisted off the rails on a curve and that the untrucked log was jammed between the curving clay banks of a deep cut. As he looked, the weight of the train behind was push-

ing another log's end into the bank. Thus relieved of part of its load, "500" quickly slackened speed. The engineer, realizing what had happened, ran back to see if any one was hurt. Seeing Bannon on top of the bank, and the rear brakeman scrambling up toward him with a lantern, the engineer called out:-

"How did it happen, Ban?"
"Broke a flange on that hind truck. I was riding it; thought I heard it snap. Had to jump for my life. That top log just grazed my head when it slid over the other. Guess it's an all-night job

There was more talk, then speculation as to removing the wreck. Finally, the crew, finding that the rails had not been damaged, started with the forward loads that had kept on the track, running down the road to the nearest station, where the agent was found just going to bed. The wreck was reported to Conant, who promptly ordered Bannon to side-track his loads, run back to the wreck, saw the big logs in two, drag them out of the cut, abandon the pieces in the ditch along with any broken trucks, couple to the logs behind the wreck, and, after again picking up the logs that had been side-tracked. run to the mill and unload. Then Conant sent out orders for the other crew to come on duty early and take the forenoon run.

But Bannon and his crew were kept on the after-But Bannon and his crew were kept on the afternoon run for two days only. On the third forenoon a slippery track let the "toothpick" train
attain a dangerous momentum. A great log rolled
off a curve on a trestle, carrying the logs immediately ahead and behind along with it. Striking
the bed of the stream below, the "toothpicks"
bounded against the trestle and carried away
several supports. The rear of the train crushed
through the weakened structure, piling seven great through the weakened structure, piling seven great logs in a tangled mass of trestle, trucks, and bent rails. Next day the big mill sawed timbers to replace the trestle, and for the next three days the two "toothpick" crews worked under the direction of the bridge-builders, while the mill sawed lumber from the stock logs in the boom yard, and the regular logging trains worked along the few spurs between the wrecked bridge and the mill.

The two "toothpick" crews resumed work under

sharp orders to run slow, to reduce trains to nine logs each, to make two extra trips a week each, and to aid the car shops in every way possible toward keeping trucks in order. Nine working days had gone by since the completion of five hundred "toothpicks," and in that time wrecks and faulty logs had afforded but an even hundred Forty-five contract days had gone and but six hundred "toothpicks" had been loaded.

During the next four days a weakening in the trucks was noted. The crews coaxed and nursed lame equipment over bridges and around curves till the men were heartsick and began crowding the shops with the cripples. Then "toothpick" trains were reduced by lack of trucks to six loads a day, and for a week the shops mended old trucks only to have others, battered and worn, sent in. Fifty-six contract days had gone, the equipment was crippled, the crews were worked to desperation, and but seven hundred and fifty-seven "toothpicks" were credited on the daily report of progress



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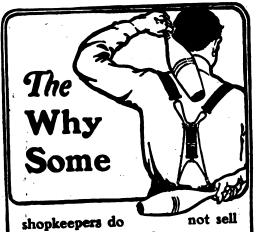
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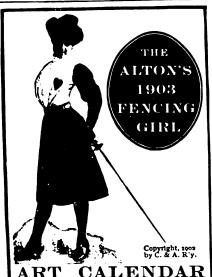
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"You are away inside the thousand dollars I allowed for wrecks," replied Peadee, cheerfully.
"Don't endanger life. We need live men, not dead ones. But let the system squirm; that's good for it. Another ten days and we shall see daylight on this contract."

But ten days brought each its changes of mis-

daylight on this contract."

But ten days brought each its chances of mishap, and each its weight of labor for the crews. The trucks haunted the shops as thickly as ever, and six logs for each train made the limit. The ten days dragged by and Chinn stopped cutting "toothpicks," having enough at the spurs to complete the work. The count of days reached seventy and the system breathed easy for the end was in sight. the system breathed easy, for the end was in sight. When seventy-two days had passed, Peadee decided to have an extra log hauled to the mill, dressed, and sent to the World's Fair. The next day the men in camps, on the trains, and in the day the men in camps, on the trains, and in the mill began to speculate on who would be sent to the Fair with the big log. On the seventy-fourth day Peadee sent a telegram to the British vice consul,—a message short and to the point,—"One thousand sticks loaded."

Conant sent "500" to the shops for much-needed repairs and told Bannon to take the small

needed repairs, and told Bannon to take the small locomotive of the afternoon accommodation train, Number Three,—which left the summit at 2.00 P. M., gather up the half-dozen big logs remaining on the spurs, attach them to the rear of the passenger cars, and run down, slowly.

"By the way, Bannon," said Conant, lightly, "now that the 'toothpick' trains are annulled, I

suppose you will accept promotion to Number Three as a regular run?"

"Oh, yes," replied the young conductor, with a smile; "of course I'd prefer to go to the World's Fair with the big log but if you say Number Fair with the big log, but, if you say Number Three, that settles it."

"I was thinking of doing that myself," replied Conant, "but I might leave you in charge of the road while I am away."

"You might see some improvements when you return," was the quick reply, and then Bannon laughed and went out to tell of his promotion.

On the trip down among the spurs, that afternoon, Bannon found five great logs waiting for noon, Bannon found nive great logs waiting for him. He placed these behind his two passenger cars, and then attached a caboose to the rear log to aid in holding back. He put his rear brakeman in the caboose, and, with his front brakeman, watched things from the passenger cars. To descend the hills of Pecdas's about root with found scend the hills of Peadee's short road with five great logs behind a small locomotive would have been ticklish business, at the best, but to attempt it with an engineer accustomed to making speed and to stopping quickly, with the aid of air brakes on every wheel of his train, was a rash venture. Bannon regretted the order before they had proceeded far. Getting on the rear platform of the passenger coach, he prepared to adopt vigorous methods in case of trouble.

For a few miles the passenger engineer eased his unaccustomed load down the grade and began to feel that he was master of it. Then he began to fret at the unusual delays, and stormed over his ill luck in being mixed up with the 'toothpicks.' A level stretch tempted him to a burst of speed. As the summit of the next grade came in sight he attempted in vain to check it. The great logs, without air brakes on the trucks, were too much for the light cars and small engine in front. The grade was reached with Bannon and his crew tightening hand brakes on the trucks and the engineer striking fire from the wheels of the coaches. Down the first grade the speed of the train held even against the brakes. Then a curve on a short level stretch brought a slight decrease, but the next grade found the logs relentlessly crowding the train along, as if the fallen firs were sensible of the absence of the great mogul and knew the weakness of the small machine in front.

Bannon, picturing the long road ahead, with its steady succession of down-grades, realized that, if the train were to gain ever so little in speed on each hill, it must soon be forced off the rails and the coaches would be crushed by the logs; or, worse still, the train would run wild through the town and.

A dreadful thought came to the young conduc-The switches would be set for the passenger train. The track ran through the train shed and out on the big wharf. If a runaway train were to cross the wharf, it would sweep the mill from its place, and plunge into the vessels lying across its end! And this train was undoubtedly beyond con-



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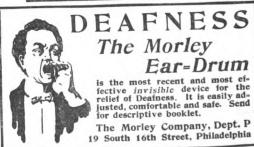
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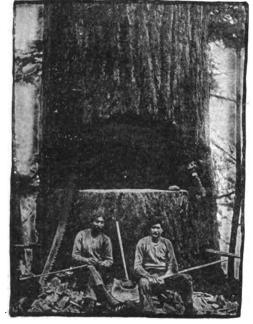
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They hewed at a line ten feet above grou

trol and running away with no power to check it! Bannon's first impulse was to jump at a station and use the wire to have the switches turned so that the train would run out on the log landing and plunge into the bay where nothing but the train would be wrecked. Then he thought of the passengers. He saw them held in the bottom of the bay by the crushed cars. There was but one way, and the young conductor promptly acted upon it. Seizing his brakeman he drew him close and shouted in his ear. Above the rattle and rush of the swaying car the brakeman heard his order:—
"Go ahead and tell the engineer to open up.

Run for the switch at the junction. I'll crawl back over the logs to the caboose, cut it off, stop

it at the next station, get on the wire, and have the road cleared for you."

Then, before the brakeman could reply, Bannon had uncoupled the band had the band h had uncoupled the head log from the rear passenger coach and was up on the head log, flat on his stomach, working himself like a caterpillar along its top. The brakeman ran through the two cars and signaled the engineer, who understood. Releasing his brakes, he sent his train in desperation down grades that had never before seen such speed.

Bannon, crawling along the top of the swaying, jolting log, thought it was one thousand feet long instead of slightly over one hundred. While he was making his perilous journey, the logs ran around several curves and crossed a short level stretch, thus giving the tightly set hand brakes of the trucks a chance to check the speed a little. In spite of this, Bannon realized that he could not crawl over the remaining four in time to cut off the caboose and save the passenger cars. So he stood on a truck and signaled the brakeman on the caboose to cut off and drop back. As he saw the caboose dropping back, Bannon wondered if the brakeman would think of the mill. He would have the track cleared, of course. Any train man would think of that. But the mill!—the mill!! Bannon feared not and wished that the runaway logs would jump the track. But runaways seldom jump, their mad flight seeming to hold them fast to the rails. Bannon looked back; the slowing caboose was hidden by a curve. He looked ahead; the passenger's flying cars were hidden by dust. Then he realized that he was alone with a train of five great logs that was to plunge down a series of steep grades, with death in some horrible form at the end of the run.

The logs were running faster than at any other time since the passenger cars had been released. The logs Bannon, clinging to a chain as he stood on a truck beam, wondered if the accommodation train would be wrecked and lie helpless in the track of the onrushing logs. He clung to his chain as the logs roared over a giddy trestle, and then, as they swung around a curve in a cut, he resisted an impulse to jump, a move which would have meant his death. Then for the first time he realized his helplessness. One small man against five enraged giant firs! For a moment his courage failed and he crouched against the log that trembled through its great length,—but only for a moment. Then it all came over him clearly,—the fleeing passenger train,—the runaway logs,—his own life,—the lives of those in the passenger cars,—the men in the mill,—all of whom he must save. Then a cool, calm thought

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possessed his brain. It restored his nerve; he became as much himself as if no danger threatened. Why had he not thought of it before? He could conquer the five giants! The man would be the master!

Swinging himself over to the forward truck of the second log, he unloosed the great chain which bound it firmly to the truck beams. Then he quickly swung back to the rear truck of the first log, for the trick he was playing was a desperate one. The second log, unchained, was free to roll on the truck beams. The monster held its place till the first curve was reached. Then it rolled out and off the truck!

Bannon, riding away on a free log, a single empty truck coupled behind it, saw the second log stick its end into the outer bank of the curve and plow the earth as the ram of a battleship might have done,—saw the log behind rise above it, turn in the air, and, as its ends met the sides of the cut, break in two,—saw a confusion of other logs, wheels, and chains whirl upward. Then the curve carried him beyond sight of the grandest tangle under the great contract. For a moment Bannon was awed at the sight. Then he stepped across to the empty truck, released its brake, and pulled the coupling pin, set the brake again, and felt his heart thrill as the speed of the empty truck began to check and the lone log shot ahead and away from him.

The agent at the junction heard the engine of the passenger train whistle for the switch, but he did not know how much reason there was for haste. He reached the platform in time to see the train plunging toward him, and flattened himself against the station as it rushed by. He realized that the train was running away from something, and rushed to his wire to clear the track ahead. Hardly had he accomplished this when Bannon's one log came roaring down. Then he knew, but even then he did not think of the mill.

The log went by the tiny station and shook the ground as a giant mogul would have done. The frightened agent again sprang to his wire and reported. Then a lone man, riding a single log truck, stopped at his platform.

"Tell em to switch the passenger train on to the wharf, and let that log go by on the log-land-ing switch," said the dusty conductor of the lone truck, deliberately. The operator recognized Bannon, and sent the message. As they listened, the instrument spoke and Conant asked a question.

"Who gave that order?"
"Tell him," said Bannon, "to switch that 'toothpick' into the bay, and ask his fool questions afterwards."

Then, when the agent had sent it as Bannon had said it, the young conductor began telling what had happened, only to be interrupted by a call from the station above, reporting the arrival of a lone caboose, with a badly frightened brakeman aboard.

Meantime, startled men at the tidewater terminal had opened switches for the passenger train and seen it stop in safety, its hot wheels smoking as the frightened passengers fled from their tem-porary prison. Then the switches were set to turn the runaway log out on the log landing,— none too soon, for almost before they knew of its approach the horrified crowd of people saw it dash through the yards, circle by the mill, and leap harmlessly from the end of the landing into deep water.

Men stood gaping at the passengers as they told of the runaway and of leaving Bannon and the five logs. Gradually the crowd realized the situation, and queries went up the line to know what had become of the other four logs. A rush was made for the office where Conant sat getting the story over the wire from up the line.

Mr. Peadee, much disturbed at the narrow escape of the passengers and of the mill, sought out Conant where he sat at the telegraph instrument, and from the superintendent learned all that the wire had said.

"Conant," said Peadee, "the steamer 'Conemaugh' is lying across the end of that dock. was on board when that log took its plunge. If it had come across the wharf it would have ripped the mill wide open and cut that great steamer in two. Many men would have been killed; myself, probably, with the others on board.

"'T was a narrow escape, surely," replied Conant. From the story the young man tells, he hit on the one possible plan to save the train and the

"A remarkable bit of coolness, remarkable!"

continued Peadee, who was evidently sincerely moved at Bannon's performance.

Gradually the room filled. The engineer of the passenger train asked news of Bannon, and other trainmen followed him in to hear it. Peadee, trainmen followed nim in to near it. Peauer, never at a loss for words with his men, joined the discussion. Finding their chief ready to listen, the men were free in their praises of Bannon. From them Peadee heard of the young conduction to the World's Fair of his engage. tor's wish to go to the World's Fair, of his engagement to the girl of his choice, of his steady promotion and hard work under the "toothpick"

Conant, suddenly interrupting, announced that Bannon, on his truck, had passed the next stop above town, and would arrive at the terminus as quickly as that light piece of equipment could descend the grades. The men made an impulsive movement to rush out, but Peadee detained them.

"One moment, boys! I want you to be the jury while we try Bannon's case. He stands charged while we try Bannon's case. He stands charged with wrecking four logs to save a passenger train, a mill, a dock, a steamer, and, above all else, numerous human lives. This was done with deliberate thought and risk of his own life. Gentlemen, what's your verdict?"

"Guilty!" roared the enthusiastic trainmen.

"Conant, you may recommend a sentence,"

said Peadee. Conant, speaking slowly, replied: "I was going to ask you for that World's Fair trip with the big log, but I guess he's earned it."

Peadee was silent a moment. He knew that

Peadee was silent a moment. He knew that the men expected something of him.

"Suppose," he said, "we sentence this man Bannon to be married at Peadee's expense, and take his wife to the Fair. Would the jury'agree?"

Conductor Bannon, when he had finished his story to the party of the most had mounted his truck released the

of the wreck, had mounted his truck, released the brakes, and glided down the grades in the wake of the flying log. Mile after mile he rode through woods whose coolness was balm, by ranches where people crowding out to the track reminded him of what had gone before, over trestles which seemed too slight to have borne the rush of those cars ahead. As the lone conductor sped on, his heart lightened with every mile that the runaway had covered in safety, yet a growing dread possessed him lest the mill had been swept away by the flee-ing log. When he reached the summit of the last hill, he could see below him the station with tis crowd of people. As he neared them he saw that they were waving their arms, tossing caps, and running toward him.

Sitting astride a truck beam, his hands grasping the brake wheel, as a millionaire might grasp the guide wheel of an automobile, Conductor Bannon, torn, soiled, and anxious, rode into the crowd and torn, soiled, and anxious, rode into the crowd and brought his truck to a stop. He saw a confusion of faces, heard a pandemonium of voices, but clearly and vividly he saw the passenger train at rest on a side track, and below him the mill, the docks, and the great "Conemaugh" at the end. Safe! All safe!! Then he felt strong hands on him, and turned to see that Peadee—the great Peadee.—was lifting him from his truck. Peadee, -was lifting him from his truck.

The Singing Child

MILDRED I. McNEAL

I know a little maiden, fair to se As an anemone, blossoming in the rain,
And from her heaven of hope comes many a strain,
Which all day long she sings light-heartedly.

'Living is joy! Oh, tune thine heart to hear This music of God's making at thine ear.''

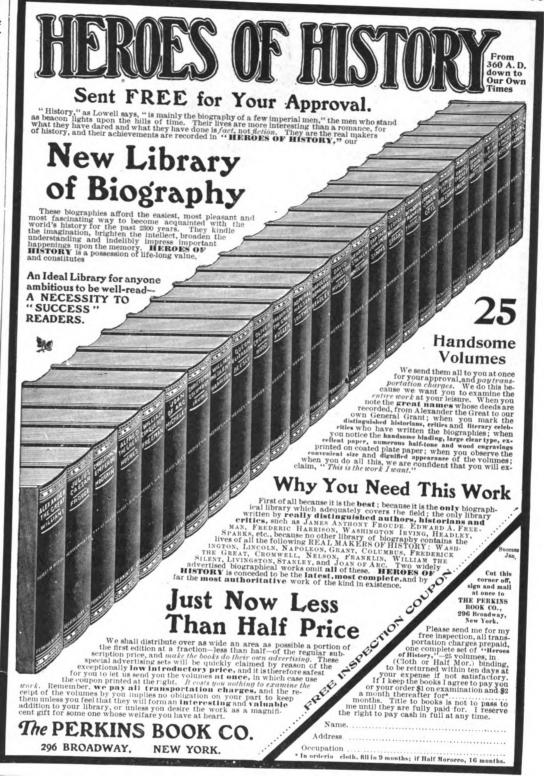
Like fall of brook in springtime, through the dim Deep-streeted city comes her singing; gay With the sunlight on her beauteous head, how may She heed the soil upon her sandal's rim?

"I could not know a friend's heart was so high And sweet a home, till sorrow bade me try."

She roams the blossoming hills when they are wet With new-fallen dew, making the same sweet stir Of song, when briers hurt and hinder her, As when she stoops to pluck a violet.

'Though thou and I have felt the press of sin, It shall not harm the holiness within."

Come close, fair child,—your smile is one that clears
The heart of troubles. Oh, lift up the blue
May morning of your eyes and let me view
A happiness that gives no heed to tears.





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The Problems of Modern Astronomy

Charles A. Young

[Professor of Astronomy, Princeton University]

[Concluded from page 10]

material for studying the currents in the planet's atmosphere, and measures are being taken at the Harvard Observatory to carry still further the photographic method.

A series of photometric observations of the eclipses of Jupiter's satellites, made at the Harvard and Paris Observatories during the past dozen years, is now under discussion, and is expected to yield a very precise determination of the time required by light to travel from the sun to the earth. Since we know the velocity of light with great accuracy from experiment, this should give a very close determination of the distance of the sun.

Saturn, with its satellites is, like Jupiter, a most attractive object,—in many ways the finest in the heavens. Its dimensions are being carefully measured; the markings and currents on its surface, much less conspicuous than those of Jupiter, are being closely studied, and the motions of its eight satellites assiduously observed and compared with theory. Very likely it has nine satellites, for, in 1899, W. H. Pickering announced the discovery of the ninth on photographs made at Arequipa, and he even went so far as to give it the name of Phœbe. The discovery has not yet been confirmed, but this is not very strange, for since then the planet has been passing through the Milky Way, so crowded with little stars as to render the identification of the satellite very difficult, if it really exists. The magnificent ring system of the planet is still under careful observation, although its real nature as a "swarm of moonlets" was years ago conclusively demonstrated by the observation of Barnard upon an eclipse of one of the satellites, the photometric work of Seeliger, and the beautiful spectroscopic observations of Keeler. Questions as to its dimensions and stability are, however, still open, nor are its mass and density satisfactorily known. A few years ago, H. Struve concluded that it was hardly more than "immaterial light," but an investigation by the elder Hall, just published, makes its mass about one five-thousandth that of the planet,—extremely small, it is true, but much exceeding Struve's valuation.

As to the outer planets, Uranus and Neptune, there is little to say. They present certain points of interest resembling those of Jupiter, and they

are not neglected.

Comets command the attention of numerous observers and calculators. Comet hunting is a favorite occupation for amateurs, and very successfully prosecuted by some. The calculation of their orbits and perturbations furnishes abundant occupation for mathematicians, especially as a most valuable exercise for ambitious young astronomers. The recent physical discoveries, already referred to, of light-pressure, ions, and corpuscles, and of their wonderful activity, promise to open a practicable road to the explanation of many hitherto mysterious phenomena; and an encouraging fact is that these bodies are very amenable to photography, which brings out features, especially in the structure of their tails, utterly beyond the reach of ocular observation. The light seems to be peculiarly "actinic."

The meteors, also, especially the swarms which follow cometary paths and visit our neighborhood with approximate regularity, have their enthusiastic students, and now hold a much more important place in astronomical speculation than formerly. It appears that many features of planetary and stellar evolution are likely to find their explanation in the gathering together of meteoric matter. By certain astronomers of the highest reputation the "meteoric hypothesis" is considered the key to nearly all the mysteries of the heavens.

the key to nearly all the mysteries of the heavens.
At present, however, the study of the stars, in its various departments, occupies the attention of the great body of astronomers to a far greater extent than all the other lines of research hitherto

mentioned.

Certain "fundamental" work is still kept up at most of the great observatories,—that of determining with the utmost precision the positions of a few thousand standard stars. These are the very foundations underlying the whole fabric of the "old astronomy," which dealt only with the place and motion of the heavenly bodies. These reference points are now found, however, to be not fixed, as long supposed, but slowly moving, each for itself, and the observations now made are largely for

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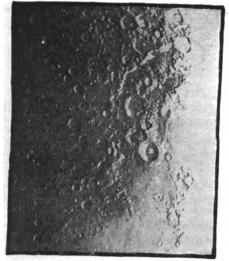


Figure 2. Photograph of lunar surface

determining these "proper motions" by comparison with older ones. Superposed upon this fundamental work, and depending upon it, is the more ambitious enterprise of forming a complete census of the starry host,—fixing by chart and catalogue the places of all the millions of stars visible in all but the largest telescopes. It is now mainly carried on by photography, and more than a dozen of the principal observatories are busy with it,—none, however, in the United States. Some portions of the work are already finished; others, hardly more than begun; and, though it has been in progress for more than ten years, it will be at least as many more before it is complete.

One large piece of similar work, the photographic "Durchmusterung" of the southern heavens, has been already carried out by Sir David Gill, at the Cape of Good Hope, with the important cooperation of Kapteyn of Groningen, who measured all the plates. It would be impossible to overrate the value of photography in this, and in nearly every other department of stellar research. It has already, to a great extent, superseded the eye in almost all the most modern lines of astronomical observation. It reaches objects that are barely visible in telescopes much larger than that which photographs them.

In the determination of the parallax and distance of stars, progress has been less rapid, though sub-stantial advances are being made. But the precision of astronomical measurement must be greatly increased before we can go very far along that line.

Spectroscopic work is prominent at present. The general spectroscopic classification of all the stars visible to the naked eye is now complete, and the work is being rapidly extended to the fainter ones. The Harvard Observatory, with its South American branch, has been, and still is, especially prominent

Many are busy with the more detailed study of individual stars, with reference to their chemical constitution and physical condition. A large and most important line of spectroscopic research is concerned with the so-called "radial motion" of the stars,—the rate at which they are moving toward or from us as indicated by the *shift of lines* in their spectra. This work, initiated by Sir William Huggins, more than thirty years ago, and afterwards most successfully taken up photographically by Vogel at Potsdam in 1888 is now graphically by Vogel at Potsdam, in 1888, is now vigorously prosecuted at numerous observatories abroad, but nowhere more efficiently than at our own Lick and Yerkes Observatories. Its most interesting feature, perhaps, is that remoteness adds no difficulty: if only the star is bright enough to give a spectrum that can be photographed, its radialmotion can be measured as easily and precisely as if it were no more distant than the moon. It is found that intense activity prevails among the stars. Velocities varying from ten to fifty miles a second are usual, and still higher are not infrequent.

The combination of these results for stars in all parts of the heavens confirms the old discovery, deduced from their "proper motions," that the solar system is drifting in the general direction of the constellations of Hercules and Lyra; and it determines the speed to be about eleven miles a

An important outcome of this spectroscopic work was the discovery of "spectroscopic binaries,"
—double stars too close to be separated by any telescope manifest and their common center. telescope moving around their common center in periods of a few days or months, and with a



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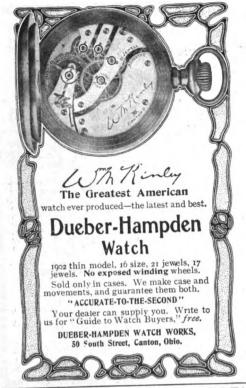
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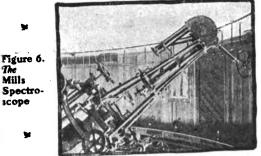
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velocity sometimes exceeding two hundred miles velocity sometimes exceeding two hundred miles a second. The effect is an alternate backward and forward shift of the spectrum lines, or a periodic doubling and undoubling if the component stars are equally bright. Nearly sixty of these pairs are already known, and the number is fast increasing. Figure 6 represents the Mills Spectroscope.

Another branch now rapidly developing is that of stellar photometry,—the measurement of the brightness and changes in brightness of the stars, prosecuted with special vigor at Harvard and Potsdam, and also in many other places. The work upon variables is particularly interesting. In the case of the "punctual" stars, as Miss Clerke calls those whose variations are regular, it is found that most of them are spectroscopic binaries: in many cases the light changes are clearly due to eclipses of one star by its companions; in others, this explanation fails and the real cause remains a subject for investigation. The behavior of the "eclipsestars' gives an indication of their limits of density, and it has recently been found that many of them are hardly more than clouds, not nearly as dense as the sun.

As to the irregular variables, especially the so-called "new stars," of which Nova Persei of 1901 was so remarkable an example, the explanations are still uncertain and debate is brisk, collision theories having rather the advantage.

One of the most notable of recent discoveries is that made by Bailey, at Arequipa, (by photography,) of the rapid variability of multitudes of stars in certain clusters. Several hundred such variables are already known. are already known. It is clear that, in these stellar

swarms, the most intense activity prevails.

Here also should be mentioned the first success in detecting and actually measuring heat from certain stars and planets, attained two years ago by E. F. Nichols at the Yerkes Observatory, and likely

to be followed up and soon surpassed.

The study of nebulæ is another topic of high and immediate interest. In this, photography is preeminent; for the light of most nebulæ, though extremely feeble to the eye, is powerful in its action on sensitive plates. Keeler estimated that the nebulæ appearing on his photographs are at least ten times as numerous as those visible in the same region through the leagest telegraph. region through the largest telescopes.

The photographs of nebulæ are naturally, therefore, incomparably superior to their telescopic images as seen by the eye, their single drawback being that the stars enveloped in their misty depths are hopelessly drowned in the surrounding glory as, for instance, in the nebula of Orion, where the bright stars of the "trapezium," so splendidly characteristic a feature in a large telescope, are utterly obliterated.

Although it has long been clear that the nebulæ are among the stars, or not far beyond them, yet until within a few months astronomers have never been able to detect the parallax of a single one. At last success has come; the parallax of the little ring-nebula in Lyra has been found to be about o. 1", and its distance therefore about thirty-two light-years, the same as that of the polestar. We called the nebula "little," but the diameter of its central hole is ten times that of Neptune's orbit.

But, after all, the most interesting researches of stellar astronomy, and, at present, perhaps, the most enthusiastically pursued, are those relating to the constitution of the great system of the stars, in which the sun with its retinue of planets is but an insignificant atom. It is true that as yet our knowledge of measured stellar distances is very meager as the basis for far-reaching conclusions, but from the motions of the stars, "proper" and "radial," their brightness and distribution in the heavens, many important inferences can already be drawn. Lack of space, however, forbids any full consideration of the subject, so vast and so fundamental in its relation to the evolutionary process by which our universe has come to its present condition.





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THE EDITOR'S CHAT

[Concluded from page 25]

Scatter Your Flowers as You Go

A LEXANDER J. CASSATT, president of the Pennsylvania Railroad Company, recently announced a voluntary increase of salary for all those of the company's employees who were receiving less than two hundred dellars a most benefit of the period of the company's employees who were receiving less than two hundred dollars a month, (which amounts to seven million dollars,) on the ground that the railroad was prosperous, and that those who helped operate it should share in

its prosperity.
Your business may not warrant a large increase to your employees this year, but there is nothing to your employees this year, but there is nothing to prevent your enlarging their salaries by a large increase of your interest in their welfare, by greater kindness and consideration toward them.

You tried, perhaps, scolding, fretting, and nagging last year. You were often inconsiderate, even brutal, and vented your disagreeable feelings, your passion or spleen on those about you. You used your employees as a sort of kicking post, made them the victims of your dyspepsia, late hours, or otherwise irregular life. Try love's way this year. Show kindness and sympathy where, bitherto you have displayed calishness and up hitherto, you have displayed selfishness and unkindness

Lead your employees, instead of driving them, by appealing to the best and noblest in them instead of the worst. People are more easily led than driven. If you lead them they will not only do much more for you, but the quality of their work will be better, and they will respect you more.

There is something radically wrong, if those who work for you do not respect you, if they are not glad to see you when you come to your office in the morning, or when they meet you in the street. Search within yourself and find the cause. If your employees do their work in a half-

hearted way, if they deteriorate instead of grow under your guidance, something is at fault.
You will be surprised to find how quickly love's

way will change the atmosphere in your establishment, how soon cordial and helpful relations will take the place of mutually bitter, strained, and antagonistic ones. Those who gave grudging and poor service to a hard and disagreeable taskmaster will respond very readily to a little kindness and generous appreciation. Praise, generous, whole-hearted, unstinted praise, now and then, will not hurt them, but, on the contrary, will act like lubricating oil on dry and squeaky machinery,

and its reflex action on yourself will be astonishing.

Try love's way this year. You will find that it will make your machinery run smoothly. You will also find that it relieves the strain on yourself.

Try it, you fault-finding, scolding housewife! Instead of nagging your servants from morning till night, blaming continually, never praising, try sympathy and kindness with them this year, and

you will work a revolution in your household.

Instead of berating a maid before your guests when she accidentally breaks a piece of china, try to relieve her embarrassment by passing it over

cheerfully, and, in private, give her a gentle word of caution. She will be more careful in the future.

Don't give your laundress a brutal scolding if she brings you a bit of smooched linen, or if her work is not quite so well done as it was the last time. Harsh treatment will only make her sullen and unhappy, but you will find her very susceptible to kindness and gentle words.

If you show a little sympathy for a servant who is trying to support an invalid sister or a feeble mother, by occasionally sending the sufferer, out of your abundance, some little delicacy, or by giving some of your cast-off clothes to a needy member of her family, you will be repaid a hun-dredfold by the happiness you gave them all.

You mothers who scolded and punished your children for slight offenses as well as greater ones during the past year, try love's way this year. You will discover that you can love your boys and girls into obedience and respect for your wishes much more quickly, and with far better results to them and to yourself, than you can by scolding or



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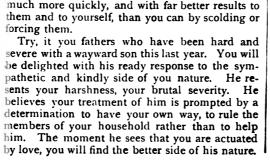
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The Inspiring Influence of Mottoes



THE starting-point of the careers of great men is an interesting study. In many an instance, a seeming trifle had been the inspiration to which a man has owed his success in life. Perhaps this inspiration has been found in a book, a magazine article, a kind word, a sermon, an act of kindness, or an uplifting motto.

Many famous men and women who have greatly influenced the world have had mottoes which served to constantly inspire them. Ruskin always kept on his desk a piece of chalcedony inscribed with the word, "To-day." A school-teacher whose life and work inspired all of his students used to keep on the back of his notebook, to which he

keep on the back of his notebook, to which he referred daily, this motto: "Always expect to succeed, but never think you have done so."

When Arago, the celebrated French scientist, was almost discouraged, he happened to pick up a piece of paper on which were the words, "Go on, sir, go on!" and the inspiration of those few words started him on the road to fame. The motto of James A. Garfield was, "There are some things I am afraid of —I am afraid to do a mean thing." I am afraid of,—I am afraid to do a mean thing. A Boston business man says that the couplet-

"It is not birth, nor rank, nor state,
But 'get-up-and-get,' that makes men great,"--

has always been a source of encouragement to him. The obliging affability with which King Edward VII., when Prince of Wales, acted on his motto, "Ich dein," (I serve,) in performing all kinds of tedious public functions, made him the most popular man in England.

Every youth, early in life, should choose a personal motto,—one that will be a battle cry to inspire and encourage him in his conflict with the world. Let it not be a mere money-making maxim, but one that will be a constant uplifter toward a life of broad usefulness. The following may help you in making your selection:

"Don't wait for opportunity; make it." [This is the official motto of the League of Success Clubs.]
"Guard your weak point."
"Look upward; live upward."
"The world makes way for a determined man."
"Either I will find a way or make one."
"There is something better than making a living,—making a life."
"Character is a poor man's capital."

It was an old Roman custom to place statues and busts of heroes in the rooms of young children, Better still is to inspire them with lofty ideals. the American custom of hanging inspiring mottoes on the walls of our homes. They are a constant on the walls of our homes. They are a constant source of inspiration. How beneficial would be the result if these words could be hung in every home in America: "Character is the grandest thing in the world!" Other good mottoes for the

"He is the richest man who enriches mankind most."
"Happiness is the echo of the pleasant words we speak
to others."
"Mirth is God's medicine; everybody ought to take it."
"The art of pleasing is the art of rising in the world."
"Scatter your flowers as you go: you will never go over
the road again."

the road again."
"The misfortunes hardest to bear are those which never happen."
"Learn the luxury of doing good."

Sometimes a motto may be impressed more easily when it is in the form of a stirring verse. This is especially the case when the motto is to be committed to memory by young children. The following rhymes have in them the swing of victory:-

"Are you in earnest? Seize this very minute, What you can do, or dream you can, begin it." "Stick to your aim. The mongrel's hold will slip, But only crowbars loose the buildog's grip."

Business men are recognizing more and more the value of decorating the walls of their offices and workshops with mottoes embodying the value of industry, economy, sobriety, thoroughness, cheerfulness and politeness. In the editorial offices of the New York "World," the following motto, "Terseness; Accuracy; Terseness," is prominent in several places. On the desks of many

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business men is the suggestive motto, "Do it now." Sometimes this motto is supplemented by the words, "and do it to a finish." Charles Wake, manager of the Equitable Life Assurance Society, publishes and distributes free a leaflet entitled, "Mottoes and Maxims That Have Helped Me." E. J. Howell, president of the United Paper Bag Machine Company, uses mottoes in hundreds of ways. He has mottoes printed on his business cards, on his billheads,—in fact, on almost every kind of printed matter that he uses.

In the office of a printer the following motto suggests to callers the value of the proprietor's time: "Be Brief! We have our living to make, and it takes considerable of our time to do it." Some manufacturing companies use "Not how cheap, but how good," as a standard for their products

The following mottoes are especially appropriate for business men:

Ate for business men:—

"Well begun is half done."

"Well done is twice done."

"Be sure you're right, then go ahead."

"Be greater than your calling."

"Promise little and do much."

"The king is the man who can."

"Be brief. Brevity is the soul of wit."

"To know how to wring victory from our defeats and make stepping-stones out of our stumbling-blocks, is the secret of success."

"On the great clock of time there is but one word,—

Now."

Possibly there is no place where mottoes can be used with greater effect than in a schoolroom. It is the custom of some teachers to write inspiring mottoes each day on the board and to require their pupils to commit them to memory. The following mottoes are especially helpful in school work:—

"Give a youth resolution and the alphabet, and who shall place limits to his career?"
"We get out of life just what we put into it."
"Not many things indifferently, but one thing supremely, is the demand of the hour."
"When you are good to others you are always best to yourself."

What is put into the first of life is put into the whole

of life."
"Shallow men believe in luck. Strong men believe in

"Do everything to a finish."
"Many things half done do not make one thing well

"Do not brood over the past, or dream of the future, but seize the instant and get your lesson from the hour."
"We stamp our own values upon ourselves and cannot expect to pass for more."

cpect to pass for more.

"Necessity is the priceless spur."

"Your talent is your call."

"Aim high and hold the aim."

"Worth makes the man; the want of it, the fellow."

Any of the mottoes mentioned above, and scores of others, attractively printed on cards of different sizes, may be obtained of the Success Club Bureau. If you are interested, write for prices and full particulars. Address: The Success Club Bureau, University Building, Washington Square, New York

The New Year ELLA WHEBLER WILCOX.

I BRING you more blessings than terrors,
I bring you more sunlight than gloom,
I tear out your page of old errors,
And hide them away in Time's tomb;
I reach you clean hands, and lead on to the lands
Where the lilies of peace are in bloom.

Start Right and Start Right Away

Start Right and Start Right Away

This is a good New Year's motto. It is not only necessary to start right, in things small or great, but to start right away. Many a man has lost because he has dallied with his purpose, delayed action. Delays are dangerous, often fatal. It is the initial step that counts. Enthusiasm evaporates, zest oozes out, ambition fades away when not exercised immediately. Every day, every hour, every minute you delay your task, it becomes a little harder for you to begin. The glow of inspiration dies out, the energy born of the first quick thought that flashed across your brain is strangled by delay, and, frequently, the purpose fades from the mind altogether, and what could have been undertaken with enthusiasm when the iron was hot now becomes drudgery.

undertaken with enthusiasm when the iron was hot now becomes drudgery.

The blighting effect of delay after one has conceived some high project is briefly described by Professor James in his "Psychology." The beginning of a new year is a good time to study it. He says: "When a resolve or fine glow of feeling is allowed to evaporate without bearing practical fruit, it is worse than a chance lost; it works so as positively to hinder future resolutions and emotions from taking the normal path of discharge."

Many a man's life has been ruined by procrastinating with heaven-born flashes of inspiration. Many a man has experienced defeat instead of victory by a few days', perhaps a few hours delay. The only sure way to win is to "start right and start right away."

Sam Loyd's Mental Gymnastics

Owing to the crowded condition of the pages of this issue of SUCCESS, it has been found impossible to publish Mr. Loyd's puzzle department. In our February issue will appear the names of some of the successful contestants to Mr. Loyd's "Eighth Book of Tan," for which an unusually large number of designs have been received.





Vigor of Body and Brain is apportioned by Nature to every man and woman who uses the right means

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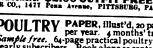
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My instruction system is so superior to all others that I always court investigation. The more skeptical you are the better I am pleased, because I have bushels of proof to finally convince you. If you are a hard-headed business man and wonder whether I am really an expert, you may be interested in the testimony of the Secretary of the Severne Wine Co., Himrod, N. Y., who says that my instruction and advice increased his business about four-fold, by actual test. I will gladly send you his letter, together with my complete and instructive Prospectus and full explanatory matter, if you will only write me. My address is

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Were it possible to reproduce here our file of voluntary letters of commendation received from prominent people who do not ordinarily permit the use of their names in advertisements, no doubt could exist in one's mind as to the extraordinary merit of the "J. B. L. CASCADE" treatment. As proof of what the Cascade treatment will do we call your attention to the following letter from Rev. J. G. B. Heath.

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J. G. B. HEATE.

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TABLE OF CONTENTS A N U A R Y, 1903

| Peadee's Toothpicks, (An Industrial Story,). 3 JOSEPH BLETHEN |
|---|
| The Power of Twelve Senators 6 |
| The Problems of Modern Astronomy, 8 CHARLES A. YOUNG |
| Orion Dombey, Grocer, (A Story,) 10 J. GEORGE FREDERICK |
| Uncle Sam's Talks on Our Country, (I.—America Among the Nations,) . 13 JOSIAH STRONG |
| The Court of One More Chance, 16 SAMUEL HOPKINS ADAMS |
| Mark Twain's Advice Brought Grant a Fortune |
| A Mother Believed in Him, Long Ago, (A Poem,) |
| The Progress of the Busy World, 20-21 |
| The Salary You Do Not Find in Your Envelope, |
| He Will Paint the President's Portrait, 23 |
| If You Can't Go to College, (II.—Mathematics,) |
| The Editor's Chat with His Readers, 25 |
| John Ruskin's Selected List of Books, 26 WILLIAM STEAD, JR. |
| Hiram Bennet's Gold Mine, (Serial Story,) . 27 HENRY WALLACE PHILLIPS |
| What Every American Should Know, . 38 |
| The World of Science, |
| When Betty Entertained, (IVA New Year's Breakfast,) 44 CHRISTINE TERHUNE HERRICK |
| The Finishing Touches in Dress, 48 GRACE MARGARET GOULD |
| The Singing Child, (A Poem.) 55 |

The February Success, 1903 A Few Important Features

The second installment of "UNCLE SAM'S TALKS ON OUR COUNTRY," by Josiah Strong, will appear in the February Success. In this paper, Dr. Strong will tell about the agricultural industry of the United States, the growth of scientific farming, and the advantage of "mixing brains with the soil." "THE INTERNATIONAL SHIPPING TRUST, AND ITS WORLD SIGNIFICANCE," is the subject of an article that will show how this great combine has become a link in the commercial transactions of the two continents. The life-story of Joseph G. Cannon, the new speaker of the house of representatives, is uplifting and inspiring and of especial interest. Mrs. M. E. W. Sherwood, whose story, "A Transplanted Rose," is one of the best of recent American novels, will contribute a paper on "MANNERS IN PUBLIC." George F. Hoar, the veteran United States senator from Massachusetts, will furnish a paper on "THB ART OF ELOQUENCE," written after years of close study of great orators.

orators.

The February issue of Success will also contain the life-story of Owen Kildare, the author, written by himself. This is one of the most remarkable inspirational stories ever written. It shows how the love and devotion of a good woman were influential in making a successful man and writer of one raised in the slums of New York City, who could not read or write up to the time he was thirty years old. The next installment of Henry Wallace Phillips's serial story, "Hiram Benner's Gold Mine," promises to be of unusual interest.

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Cleveland student, now making \$80 per week Brooklyn student, now making \$45 per week

New London student, now making \$35 per week Detroit student, now making \$40 per week

Bridgeport student, now making \$40 per week

Reading student, now making \$35 per week So. Norwalk student, now making \$25 per week IN THE SOUTH:

Dallas student,
now making \$50 per week
Galveston student,
Nashville student,
now making \$25 per week
Charleston student,
now making \$30 per week
Memphis student,
now making \$90 per week

In Foreign Countries:

Dublin, Ireland. London, England. York, England. Jamaica, B. W. I. Phillippine Islands. fork, L.
Jamaica, B.
Jamaica, B.
Phillippine Island.
Porto Rico.
Eydin, Australia.
Melbourne, Australia.
Melbourne, Bagland.
Queenstown, S. A.
Prockytio, Mexico.
Vancouver, B. C.
Moscow, Russia,
Warbery, Sweden.
Christchurch, N. Z.
Luva, Fiji Islands.

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IN THE WEST:

Denver student, now making \$35 per week Portland student, now making \$60 per week

Sacramento student, now making \$45 per week

Duluth student, now making \$43 per week Leavenworth student, now making \$30 per week

Joliet student, now making \$38 per week

now making \$50 per week
Kansas City student,
now making \$50 per week
Grand Rapids student,
now making \$25 per week

Racine student, now making \$30 per week

San Francisco student, now making \$30 per week Los Angeles student, now making \$35 per week

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Features of Leslie's for November and December: "The Mill," a striking story by DR. HENRY VAN DYKE. The Autobiography of a Thief," a genuine personal narrative of intense human interest. "Richard Mansfield," a masterly sketch by the first of theatrical critics, WILLIAM WINTER, Stories by such authors as HARRY STILLWELL EDWARDS,

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