PROGRESS of the WORLD

SOME THINGS THE BUSY WORKER IS DOING FOR THE ADVANCEMENT OF CIVILIZATION

HOW SUCCESS IS WON

Sound Advice From Man Who Retires at Early Age With Fortune.

POOR BOY IN BEST POSITION

Hunger as a Spur and No Meal Tastes as Good as One That Comes After Hard Day's Work—Bird Shot Don't Get the Big Game.

The maxims of a man who retires at the age of fifty to enjoy a fortune ample for his needs are well worth considering by all youthful aspirants for like success. They are as follows:

An employer generally makes the pay envelope fit the boy. Wage and work balance on the scales everywhere.

The greatest shortage here, there, everywhere, is in men of brains, energy and judgment who are workers.

Brains without energy are like a hobbled horse; energy without judgment requires the second man to direct the first.

There has never been a time so essentially rich in opportunity. The United States is moving in a thousand directions where a step had not been taken thirty years ago.

A poor boy is in the best position. Hunger is a spur. No meal ever tastes so good as the one that comes after a hard day's work.

It may be comfortable to be born wealthy, but it doesn't insure one's status or success in business.

It doesn't do to be satisfied with small things. Big game is never brought down with bird shot.

One must not tie his ambition to a post, else its limit will be a small circle.

When a man has made a competency he should retire. The great trouble with most men is that they try to get a little more than they have—when they really don't need it.

Atmore L. Baggott of New York city, who has attained such success in conducting his own affairs, is well qualified to give advice to young men. He was born to the ordinary walks of life, grew up an ordinary boy and is, therefore, a type of the many rather than the few. He says:

"Somewhere in the country there may be a boy who will find a lesson in my most unspectacular beginning. A guardian had my small affairs in hand, for both my parents were dead before I was ten years old. When I was sixteen he told me I was to go to work for an insurance company. The true value of my services at that time can best be understood by the amount of my wages. I got not a penny, and I earned it. Generally speaking boys have an exaggerated idea of their importance in the world. It was true in my case. I could not see then as I can now, that until such time as I began to learn the ropes the value of my service was properly recognized by a cipher. Each week added something to my store of information until, with an accumulated knowledge of 14 weeks, it seemed as if I had embraced much of the total of fire insurance wisdom. Then I got my first envelope. It contained six dollars. No sum of money ever looked so large to me as that. It no doubt was proper pay for me at that time, just as nothing had represented my true value before that.

"The lesson in this is that an employer generally makes the pay envelope fit the boy or man. A boy's first thought should be as to what he has to offer his employer, not what the employer may offer him. Wage and work are made to balance on scales everywhere and the more work there is on one side the quicker is it made apparent that a money readjustment is necessary."

New Way of Testing Metals.

Experiments made in Budapest have shown that the spark rays made by the incandescent particles thrown off from iron and steel when put upon an emery wheel afford a means of testing the composition of the metals. Carbon steels, manganese steel, and steels containing tungsten and nickel, each give a characteristic spark of different form and colors, which are easily distinguishable. The form of the spark picture changes with the quantity of carbon. Ever so slight a difference as 0.01 per cent of carbon, it is said, can be detected in this manner. Pointed branching lines denote carbon steel; tool steel shows the appearance of "blossom" on the branches; tungsten steel gives red streaked rays and shining points, with little balls thrown out of the formation; and an explosion appearance in the circulation denotes the presence of molybdenum, vanadium or titanium.

Driven by an electric motor, an ingenius machine has been invented to paste paper labels on bottles, no matter what their shape.

TRY CLEAN SLATE HABIT

Is Sure Cure for Many Kinds of Unhappiness Breeders Among Girls.

Are you one of the girls who are given to moping, to looking fearfully into the future, or to lamenting the past? There is no surer cure for these unhappiness breeders than to cultivate the clean slate habit.

What is it?

Live a day at a time. Start each morning with a fresh record to be made. This must not be muddled with the blurs of yesterday nor the possible blots of tomorrow.

The girl who gets the clean slate habit, realizing the value of living but a day at a time, determines to make that day as bright and helpful as she can. She seeks to write upon it only pleasant things. If the disagreeable ones must go down she looks forward to the morrow when they can be rubbed out, though perhaps they must be rewritten.

The girl with the clean slate habit does not force early pinkies by dread of the morrow. She takes all the fun of the present until it becomes a habit; such a strong habit that even the worries as they come fail to blur the slate.

Try it just for one day. Begin this morning to rub out of your recollection the things you failed to do and the things you may fail in doing. Determine, until you go to bed tonight, to live for the next thing as well and as cheerfully as you can.

If a day spent is not entirely as you would spend it, at least the average of happiness is higher than if you passed the hours in vain regrets and vainer forebodings until no strength is left for sane living.

ARE ADVISED TO PAINT

BOYS AND GIRLS LEARN MORE OF NATURE'S BEAUTY.

Should Get Out Into the Fields and Try to Put Down What They See.

In a practical talk on landscape painting for boys and girls, in the Woman's Home Companion, the author says:

"If you wish to discover the real beauty of the out of doors, learn to paint. Even though you do not yet draw very well, you may still attempt to work in color and may learn drawing and painting in the same picture. If you can get the shapes of objects fairly well, and can set them down in their relative proportions, that will do for a beginning.

"You may use water colors, pastels or oils. Oils are by far the best. The great pictures of the world have been done in oils. It is the best medium for students to use, because it requires large and direct handling; faults are more readily seen, and, if you can use oils well, you can paint in other mediums without much trouble.

"If you can study with a good landscape teacher, by all means do so. If that is not possible, there is still much that you can do by yourself, for nature is the great teacher, and everyone who wants to paint well goes constantly to nature. Go out into the fields and look and look, and then, with the best skill you have, put down what you see. Every time you look and study you will paint better for it, and every time you paint, trying carefully to reproduce on your canvas the shapes and colors of nature, you will see more and better."

DISCARD THE OLD IDEAS

Even in Simple Occupation of Shoveling Science Proves an Important Factor.

EASY THING TO PROVE IT

For First-Class Shoveler There Is Given Shovel Load at Which He Will Do His Biggest Day's Work—One Secret of the Science.

In his second article which recently appeared in the American Magazine, Mr. Frederick W. Taylor shows graphically how scientific management displaces the old, crude rule-of-thumb methods, even in such simple occupations as shoveling. He writes:

"Although the reader may be convinced that there is a certain science back of th handling of pig iron, still it is more than likely that he is still skeptical as to the existence of a science of doing other kinds of laboring.

"For example, the average man would question whether there is much of any science in the work of shoveling. Yet there is but little doubt, if any intelligent reader of this paper were to set out deliberately to find what may be called the foundation of the science of shoveling, that with perhaps fifteen or twenty hours of thought and analysis he would be almost sure to have arrived at the essence of this science. On the other hand, so completely are the rule-of-thumb ideas still dominant that the writer has never met a single shovel contractor to whom it had ever even occurred that there was such a thing as a science of shoveling.

"For the first-class shoveler there is a given shovel load at which he will do his biggest day's work. What is this shovel load? Will a first-class man do more work per day with a shovel load of five pounds, ten pounds, fifteen pounds, twenty pounds, twenty-five, thirty or forty pounds? Now, this is a question which can be answered only through carefully made experiments. By first selecting two or three first-class shovelers, paying them extra wages for doing trustworthy work, and then gradually varying the shovel load and having all the conditions accompanying the work carefully observed for several weeks at a time by men who are used to experimenting, it was found that a first-class man would do his biggest day's work with a shovel load of about twenty-one pounds. For instance, that this man would shovel a larger tonnage per day with a twenty-one-pound load than with an eighteen-pound load of his shovel. It is, of course, evident that no shoveler can always take a load of exactly twenty-one pounds on his shovel, but nevertheless, although his load may vary three or four pounds one way or the other, either below or above the twenty-one pounds, the shoveler will do his biggest day's work when his average for the day is about twenty-one pounds."

HE WAS SORE ON HIS JOB

Dissatisfied Bookkeeper Tries to Find Better One—Experience Points a Moral.

The main character of this narrative was dissatisfied with his job. This being a phenomenon so universal in its manifestations as to preclude any possibility of misunderstanding, there is no particular necessity for stating why he was dissatisfied with it; perhaps it was pay, perhaps duties, likely egotism. At any rate he concluded that the simplest manner to find a better one was to advertise in the classified columns of the Scream and proceeded to do so. As he was of the age which has not yet learned to hide its light under a bushel in such a manner as to make every one realize that it is hidden there, the advertisement read something like this:

"General office man 25 years old; efficient bookkeeper; would like position at more money. Nothing under $150 considered. Answer E 45."

He received an answer the next morning advising him to call a little before noon at the Bilke Pickle company. The letter added that they had nothing at the moment, but expected to have a position as assistant head bookkeeper in a couple of weeks.

Well, as the position which the young man happened to be holding at the moment was that of assistant head bookkeeper for the Bilke Pickle company the matter dropped about there. It might be further noted, though, that he was at work a little earlier the next morning and worked a little later that night.

Moral? How would "O wad some power the gifte gie us," etcetera do?

Cement Gun.

We are familiar with the rivetting gun, and the hydraulic gun. Now we have the cement gun. This is not a new weapon for the navy, but a machine for squirting concrete mortar in stucco form upon a surface of any kind. The apparatus consists of a compressor, with gasoline engine and two tanks, mounted on an automobile truck. One tank carries the dry mixture of cement and sand, and the other contains the water, and both are under pressure. A novel feature is that the dry cement mixture and the water are pumped separately to within an inch of the nozzle. At this point they are mixed, and so thoroughly that a perfect combination is discharged upon any surface, rapidly building up a very solid concrete structure.

New Idea in Saddle.

A saddle that a New Jersey man has patented, includes a leather flap to cover the buckles that frequently wear out a rider's clothing.

POSSIBILITIES AMONG CACTI TOO LITTLE APPRECIATED

There Are Several Different Types of the Plant, the Phyllocactus Being Among the Most Popular—These Produce Some of the Most Magnificent Flowers Known to the Tribe.

(By BESSIE L. PUTNAM.)

There are possibilities among the cacti too little appreciated. Blossoms among them are unexcelled in color, form and richness of effect, while the peculiar growth of many is a subject of interest to all plant lovers.

It is the popular supposition that they must not be watered freely. In fact there are certain seasons when this holds true—during the dormant period; but when a plant shows indication of new growth it should then have an abundance of water.

There are several different types of cacti, the phyllocactus, or leafy-stemmed variety being among the most popular. These form handsome plants at all seasons and produce some of the most magnificent flowers known to the tribe.

Those with large scarlet flowers are most frequently seen, though there is a pink one with trumpet-shaped blossoms which is, if possible, even more beautiful.

The Queen cactus, one of this group, is often called the night blooming cereus, though the flowers are smaller than the true cereus, pink tinted and with a delightful odor.

It blooms at night and certainly deserves the large crowds which flock to see it open. The phyllocactus group remains in bloom for weeks if not exposed to too much heat.

The cereus types, which require a more sandy soil, are readily recognized by their slender, half-climbing habits. The rat-tail is one of the best spring bloomers, suitable for the hanging basket.

As soon as these appear water freely and give all the available sunshine. Liquid manure applied once a week is, during the growing season, as beneficial to this and to all other cacti as to the geranium. The flowers are of a rich magenta and borne in profusion.

Th genuine night blooming cereus is a snaky looking plant, but from the time the buds appear in the early spring, looking like tiny tufts of cotton, until the wondrous blossoms are perfected the plant is always an object of interest.

The opening of a cereus blossom can never be appreciated until seen. There is the quivering of the petals, the gradual disclosing of the creamy interiors, within which is a most marvelous mechanism of stamens surmounted by the star-like pistil. Only the white pond lily gives any suggestion of the wondrous purity and even this the cereus far transcends. Yet it is easily grown.

If insects attack, spray or wash off with kerosene emulsion, a wing being

Cactus Garden in Southern California.

all like a richer soil than that accorded to most of the tribe, and may, in fact, be treated as a geranium, fertilizing when the plant is growing and watering very sparingly during the period of rest.

The humming bird or lobster cactus is another plant which should be in every collection. The entire plant, which is leafy, is beautiful at all times, and in late autumn or early winter the load of pink buds depending from the ends of the leaves suggest the common name, and it requires little strength of the imagination to think them winged visitors, the poise imitating that of the humming bird almost perfectly. The opened blossom is an exquisite shading of white and rose and the plant excellent for cleaning this plant. The scale and aphis are its chief enemies.

Some plants are slow in attaining blooming size, yet when this is once reached they are faithful each year. The humming bird and rat-tail are notable for exceptions, blooming nicely when from a few months to a year old.

Wants Pure Buttermilk.

A St. Louis woman is advertising for pure buttermilk. She recites that no dairyman need apply because she has tried all the dairies in St. Louis and has been half around the world in a vain search for buttermilk of the old fashioned kind, churned in the old way with little pieces of butter floating around in it.

GOOD STORAGE FOR CABBAGE

The early cabbage which is grown by the market gardener is cut, carefully trimmed, and marketed from his wagon or stall. The later crop which is harvested in the fall may not be marketed immediately, but may be stored temporarily in a cool, well-ventilated building in which case the heads are usually cut from the stalks, carefully trimmed, and stored in small bins or on shelves. If such facilities are not available an area on a well-drained portion of the field is prepared for the storage of the cabbage. The preparation usually consists in leveling an area wide enough to allow about five heads of cabbage to be placed, roots up, in a continuous row or belt, as suggested in the illustration. The outer leaves are all preserved and carefully wrapped around the heads as they are placed, after which the whole is covered with a layer of straw or marsh hay, and, as the weather increases in severity, with a slight layer of earth. In the milder portions of the country this protection is employed for the whole winter. Farther north the soil layer must be increased, and where winters are severe storage houses should be used rather than this primitive method of storing.

BADLY DESIGNED FARM DWELLING

Appearance of Home Can Be Improved on by Covering of Vines—Permanent Plants Are Best.

(By WALTER B. LEUTZ.)

Badly designed farm houses can always be improved in appearance by a covering of vines. It is a matter of regret that the work of the turning lathe and fret saw still holds its place in many American houses; but as long as we continue to decorate our dwellings with jigmarigs and porch posts turned and carved into ugly fantastic shapes, those who can discern their ugliness must content themselves by hiding it with the leaves and flowers of clinging vines.

The Moon vine is not understood as it should be. A single vine is of not much use but in large numbers trained to cover a side of a house or high porch it is most slightly with its mass of white flowers which, however, unfortunately, appear only at night.

Growing of temporary vines is only to be tolerated when permanent vines will follow. They should be planted together in order that during the two or three years required to bring the permanent plants up the temporary vines may serve as a substitute and then be dropped without much loss of beauty.

Big Apple Crop.

Berkley county, West Virginia, produced 100,000 barrels of apples last year and the entire crop was sold in the orchard to buyers at from three to five dollars per barrel.

Tobacco In England.

Tobacco was introduced into England from America by Raleigh in 1586 and wheat, barley and oats were introduced into the United States in 1602.

Hood's Sarsaparilla

Acts directly and peculiarly on the blood; purifies, enriches and revitalizes it, and in this way builds up the whole system. Take it. Get it today.

In usual liquid form or in chocolate coated tablets called Sarsatabs.

Constipation Vanishes Forever

Prompt Relief—Permanent Cure

CARTER'S LITTLE LIVER PILLS never fail. Purely vegetable — act surely but gently on the liver. Stop after dinner distress—cure indigestion, improve the complexion, brighten the eyes.

SMALL PILL, SMALL DOSE, SMALL PRICE.

Genuine must bear Signature

Brent Good

If afflicted with sore eyes, use Thompson's Eye Water

A GREAT TEMPTATION.

Aunt Dinah—Ephrum, dat ole Cunnel Leigh is got some of de fines', mos' lubly young turkeys I ever sot my blessed eyes on. Dat am a fac'!

Uncle Ephraim—Yaas, honey, dis chile knows it. An' I on'y got 'ligion two weeks ago! An' jes' two days befo' Thanksgibbin! Dinah, I'se mighty 'fraid I's goin' to be a backslider, shuah as youah bohn!

FREE

A trial package of Munyon's Paw Paw Pills will be sent free to anyone on request. Address Professor Munyon, 53d & Jefferson Sts., Philadelphia, Pa. If you are in need of medical advice, do not fail to write Professor Munyon. Your communication will be treated in strict confidence, and your case will be diagnosed as carefully as though you had a personal interview.

Munyon's Paw Paw Pills are unlike all other laxatives or cathartics. They coax the liver into activity by gentle methods. They do not scour, they do not gripe, they do not weaken, but they do start all the secretions of the liver and stomach in a way that soon puts these organs in a healthy condition and corrects constipation. In my opinion constipation is responsible for most ailments. There are 26 feet of human bowels, which is really a sewer pipe. When this pipe becomes clogged the whole system becomes poisoned, causing biliousness, indigestion and impure blood, which often produce rheumatism and kidney ailments. No woman who suffers with constipation or any liver ailment can expect to have a clear complexion or enjoy good health. If I had my way I would prohibit the sale of nine-tenths of the cathartics that are now being sold for the reason that they soon destroy the lining of the stomach, setting up serious forms of indigestion, and so paralyze the bowels that they refuse to act unless forced by strong purgatives.

Munyon's Paw Paw Pills are a tonic to the stomach, liver and nerves. They invigorate instead of weaken; they enrich the blood instead of impoverish it; they enable the stomach to get all the nourishment from food that is put into it.

These pills contain no calomel, no dope; they are soothing, healing and stimulating. They school the bowels to act without physic.

Regular size bottle, containing 45 pills, 25 cents. Munyon's Laboratory, 53d & Jefferson Sts., Philadelphia.