THE BEE: OMAHA, WEDNESDAY, JANUARY 13, 1915.

Science

Problems

for Workers

By EDGAR LUCIEN LARKIN.

Q. "What is the area of the sun?"

197,360,650 aquare miles, earth.

glass of soda, therefore:

beautiful:

A. 2,356,061,250,006 square miles, sun

These figures convey to the mind the immonse magniture of the sun when compared to that of the earth. Diameter, sun, \$55,000, and mean, of earth, 7,916

Q. Here is a harassing thing in frenzied finance up from San Francisco, the

Five young ladies entered a candy tore. Each treated all of the others to a

Five girls pay 25c each, all paying. \$1.95 Five other girls enter and repeat the above, paying 1.25 Ten girls pay out for fifty sodas \$2.50 HIGH FINANCE. Six girls came in and each treats, all: six times thirty equals. 31.80 Four later treat each and pay four times 20c, or

The Bee's Home Magazine Page

Republished by Special Arrangement with Harper's Bazar

New Designs of Smart Effect

"Why should the first ten ladies pay too less than the second ten, when all buy the same amount? Would it work out even on the cash register? We, including two teachers, and all mathematicians in our neighborhood, will watch each morn ing for your answer. -FRED CAVAN-AUGH.

A. I was entirely oroken up when I heard that teachers could not solve this on sight in two minutes, just in their heads, without pencil or paper. That first set of girls bought twenty-five glasses of soda-pop; the second, twenty-five glasses; the third, thirtq-six glasses, and the four, sixtoen glasses. The first two sets, fifty glasses; second two sets, fiftytwo, and put up 10 cents more-that is, the first ten ladies did not buy the same amount as the second delectable set, and adorable.

has about 7,400000,000,000 tons of coal mineable, by present methods, in 250 years, is there any marked stimulation of plant growth expected by science as the result of increase of carbon in the air? Or will reduced quantity of solar energy compared to that supposed to have been conserved by the atmosphere in former ages by expected to prevent it?"-WILL H. SPICER

A. The pouring forth of carbon from millions of chimneys is an economic probfixation of carbon by plants went on uninterruptedly, save possible cessations due to glacial epochs.

No definitive data can be given regard-

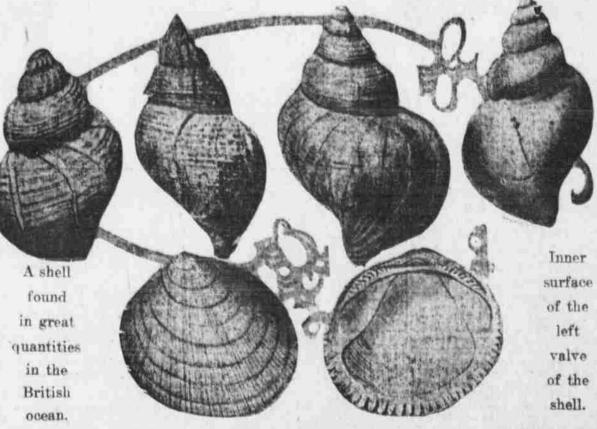
But now the process is reversed. Tons These come out of the foundations of of carbon pour into the air daily from England. They go back in the Great take the corals, another species of chalk-hosts of fires and furnaces. Within fifty Chalk Age, and the early epochs of the secreting animal, and observe the exyears this process has rapidly increased. And if the coal supply is only 7,400,000. of the coal supply is only 7,400,000. of moliusks, and observe how enduring are be exhausted in not very distant future. be exhausted in not very distant future. Tertary Age. Compare them with mod-colonies of these little creatures. work-ing together upon a common plan, have produced in solid, semi-translucent, ala-hibits, into a spiral shell, whose very

Shells the Real Historians They Are the Oldest Relics of Life on This Planet and Connect the

Ancient and Modern World

A common shell found in certain cliffs in England, and to the right a form living in the North Sea and reversed.

Here are seen two shells of the common whelk. The one to the right is a water-worn specimen, The other has the spire of the shall reversed.



By GARRETT P. SERVISS.

The really ancient history of the earth is told by shells. The bones that geologists find belong to relatively recent periods. The true patriarchs were the shell-makers, ancestors of the oyster and the clam.

It is no very uncommon thing to find shells which must be millions of years old, so perfect and beautiful that, at first sight, one might think that their living inmates had only just quitted them. The animals that existed ages before man's appearance were as beautiful in form, color and decoration as those of today, and the shells by which they lived and which they bore with them, as we carry our garments, have outlasted the seas in

which they grow and endured while conlem, and leads to thoughts of man's total tinents shifted their outlines like clouds, supply of coal. During the millions of and mountain ranges rose and sunk and years in the earth's carboniferous age rose again like the crests of ocean waves. A number of these symbols of longpast life upon this earth of ours are shown in the photographs on this page.

in the same beautiful material forms. world were mose completely connected, even begin to comprehend. You can see something of that connec- One cannot get away from the wonder ion in these pictures. Look at the four which is inspired by the reflection that spiral shells, representing the common the same life force, or tendency, of whelks of today and similar animals liv- whatever you may call it, which produces

more numerous, ancient animals, which life vanished from the living world ages ago, istic forms, are equally persistent. they look to us "like Yankee peddlers among the tribe of red Indians." See, if you can imagine any reason for the selection of such forms as shells

present by the life-forces animating the various species of soft-bodied, almost shapeless, animals, called mollusks. Or Tertiary Age. Compare them with mod- quisite shapes and colors which whole chemical substances and they are

told acons of time inspired their dull, ate its beauties; their beauty does not shapeless, unidentifiable brains with an serve, as in the case with flowers, to unchanging idea, miways realizing itself attract the attention of other creatures, which, like bees and butterflies, may Geologiats know the ancient ocean fertilize them; the makers of these shells which covered the present site of the do not possess the faculty of vision by British Isles in the cretaceous, or great which they might admire themselves of halk, age as the "chalk sea," and their fellows, and yet, all this beauty, Huxley remarked that it was by the exisits, and, by persisting age after age, copulation of the chalk sea that the an- shows that its existence is part of some cient and the modern inhabitants of the great creative plan which we cannot

ing in the ancient sea. As Huxley has one of these spiral shells today has been said, when we find these modern forms in operation, in precisely the same way, scattered among the forms of other and for whole acons of time, while other forces, producing other character-

The force of gravitation draws all matter toward a center, the life forces shape it into an almost infinite variety of forms, and yet each of the life forces produces its own particular result. You lift up a handful of sand and let it go. and gravitation makes it fall straight down. Gravitation knows only that ond act. You let the vital forces of a growing mollusk take possession of the same

One of the new pompadour designs in pussy willow silk inspired this dancing frock. The erinoline skirt is banded in swansdown and frilled in silver lace, and the corsage is softly draped to give

- Carlow

The Tipperary cloth may be fashioned into the snappiest of trot-about suits. This, in the new buckskin tone, matches the top of the boots. The flare skirt has "comfy" pockets and a jaunty

\$2.63

Q. "The carbon present in the air amount to about 700,000,000 tons. The earth

the modest 1870 decollete.

jacket showing the raised waist line.

Use and Abuse of Self-Conceit

By DOROTHY DIX.

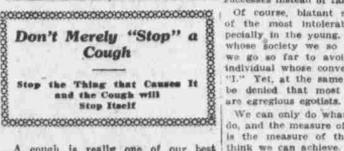
One of the most perplexing problems that parents confront in rearing a child is whether to foster or suppress his self. conceit.

1

This is a modern psychological trouble. The question never bothered our ancestors. They held that it was a parent's first duty to bring up a child in humility, and to point out to him his defects and shortcomings in a way to exterminate every particle of vanity in his soul. Thus, if a girl was homely, her mother dweit upon her lack, of good tooks and assured

11

her she'd never catch a husband. If she was awkward her family commented on it with the cruel youth that she has never conquered her candor displayed only by one's nearest



A cough is really one of our best friends. It warns us that there is in-flammation or obstruction in a danger-ous place. Therefore, when you get a bad cough don't proceed to dose yourself with a lot of drugs that merely "stop" the cough temporarily by deadening the throat herves. Treat the cause head the throat nerves. Treat the cause—heal the inflamed membranes. Here is a home-made remedy that gets right at the cause and will make an obstinate cough vanish more quickly than you ever thought pos-sible.

Put 2½ ounces of Pinex (50 cents worth) in a pint bottle and fill the bottle with plain granulated sugar syrup. This gives you a full pint of the most pleasant and effective cough remedy you ever used, at a cost of only 54 cents. No bother to prepare. Full directions with Pinex.

It heals the inflamed membranes so gently and promptly that you wonder how it does it. Also loosens a dry, hoarse or tight cough and stops the formation of phlegm in the throat and bronchial tubes, thus ending the persistent loose cough.

Pinex is a highly concentrated com-pound of Norway pine extract, rich in guaiacol, and is famous the world over for its healing effect on the membranes.

To avoid disappointment, ask your druggist for "214 ounces of Pinex." and don't accept anything else. A guarantee of absolute satisfaction, or money prompt-ly refunded, goes with this preparation. The Pinex Co., Pt. Wayne, Ind.

learning, his father impressed on him that he was a fool. If he were timid of minding him of his faults. nature, he was twitted for being a coward, and if either girl or boy had any On the contrary, it is the bold, the agshining attractions or virtues, it was held little short of a sin to mention them.

gressive, those who have faith in their own abilities, who succeed. Those who Our parents did only what they conwin out are the people who believe they ceived to be their duty in cultivating a can win and go in to win, and who are meek spirit within us, but many of us assailed by no doubts as to their own bear the scars from their scourging on superlative ability.

our souls. Children are abnormally selfconscious and sensitive to criticism. Their households are their little worlds, and nothing that the big world ever does to the other self conceit. The ideal condiyou in later life ever cuts to the quick as did being held up to scorn in your helpless youth.

I know a handsome woman who would but not to be egotistic. Like other ideals, be a regal beauty except that she holds this is seldom realized, and it's too subtle herself 50 per cent off of her looks instead of 20 per cent over them, because child,

she has never been able to get over hav-Therefore, just as a good working proping been habitually addressed by her self-concelt than it is to suppress it. By mother as "you ugly little thing" when she was a child. I know another woman the time he or she has fought his or her who still falls over her feet when she battle with the world the world will have walks because the idea that she was pruned down the self-conceit into selfawkward was so ingrained in her in her confidence.

After all, self-conceit is the greatest one defect, but I know many men who motive power in the universe. Vanity only lack self-confidence to make them and the desire to show off have been uccesses instead of failures.

the real mainspring of nine-tenths of the Of course, blatant self-concelt is one big things that have ever been done. It of the most intolerable of faults, esis because he had to deliver the goods pecially in the young. There is no one that has made many a boaster a great whose society we so loathe and whom man. Parents do well to consider this we go so far to avoid meeting as the phase of the aubject before they try to individual whose conversation is one big suppress self-conceit in their children. "I." Yet, at the same time, it is not to The egotist may not be a lovely, altrube denied that most successful people istic character, but he gets there.

We can only do what we think we can RACCOONS WHIP NERVY MAN lo, and the measure of our achievements is the measure of the things that we

think we can achieve. We must believe, Horace Robinson of Smithville, Md. absolutely in ourselves before we can in spire the confidence of others in us. bad a thrilling experience in the top of These bromidic truths should be taken into consideration by parents before they set a remorseless heel on their children's vanity, for it is an indisputable fact that battle ended Robinson fell from the tree students and a much larger number from completely exhausted. Three of his ribs Japan. to make a girl or boy believe that she were broken, a thigh was badly hurt is inferior to others dooms her or him a second place in the world. and it is feared he is internally injured.

The young man was passing through a We get only what we demand from our cilow creatures. If we are shy and deprecating and hang back nobody is oak tree, which the animals climbed. going to push us forward. Still less are Thinking he could capture one of them they going to insist on conferring on us alive, Robinson also climbed the tree. any of the laurel crowns of life. But when he reached the raccoons they

It would be interesting to know how showed fight and for fifteen minutes many of the failures that we see all the young farmer had to battle at a about us are the direct results of the great disadvantage to save his life. conscientious efforts of parents to sup-The raccoons surrounded him, and press self-concelt in their children. Here though he kept his arms going like pisis a man of talent, but he lacks "push." ton rods, one of the animals every now cause in his childhood he was taught and then would inflict an ugly gash to be humble and stand aside for other with his claws on some part of his body. people. Here is a man at whose doors Robinson kept up the fight until, comopportunity knocks, but he docan't pletely exhausted, he fell to the ground answer the call, because he is afraid. He dragged himself to the country road, His nerve was destroyed by his having where his moans were heard by his had his faith in his own ability de- father, W. H. Robinson, who picked stroyed when he was a boy. Here is an- him up and carried him home -Battiother man who never lets the world find | more Sun.

relatives. If a boy were a little slow in jout how great his real abilities are, be-Spleer. cause he is timid and reserved, made

The area of the earth's surface is that way by his parents continually re- 197,360,650 square miles. The depth of the

atmosphere of the earth is not known; estimates have been made of 200 miles. From trigonomerical measurement of paths of meteors when incandescent, the air is known to be at least 100 miles deep. Then the addition of 1,117 cubic miles of solid carbon, or the entire quantity ex-

panded to gas, would be of about the cate line to be drawn, on one side of dilution of drugs with sugar of milk, by

which is proper self-confidence and on our good homeopathic brethren in their strange vagaries. One cubic mile of air tion is for a man or woman to esteem at sea level weighs 5,940,173 tons, and himself or herself highly, but not too water is 773 times more dense than alr.

highly, to have faith in his or her ability, Rate of diminution of solor enermy is unknown, Circulation of electrons from sun to sun may sustain them during mila distinction to be made plan to any lions of coming years.

Therefore, just as a good working prop-osition it is better to encourage a child's self-conceit than it is to suppress it. By be flat?-M. Sirrom, San Francisco, Cal.

end of one mile, thirty-two inches at the companion known merely as discipline. end of second mile, seventy-two at third Almost all our greatest woes come our mile, and so on for ends of miles, of our inability to discipline our own na-amounts of depression below tangent being eight inches multiplied by the square of the number of miles. The eye alone ing a diseased nerve removed from a cannot see this small curvature. Gravitation holds all things on the earth's sur- ing up through the scale of things to the it is a force, but its cause is ab- woman who divorces the man she loves solutely unknown. A theory is that this rather than stay with him and heip him form of attraction is due in some way to electricity, but this is a theory only.

Do You Know That

Foreign students to the number of 4,222 were in attendance at colleges and universities of the United States last year an oak tree recently with five raccoons These students are distributed over 275 which he encountered while on his way different colleges, universities and achools to visit a neighbor. When the bloody of technology. There were 594 Chinese

The number of sheep estimated to have been shorn last season in Australia and strip of woods when he encountered the New Zealand was 109,622,354, including raccoons. He followed them to a big jambs, which produced seven pounds and twelve ounces per head-including lambsas against seven pounds for the previous 803408.

> Between 1910 and July 1, 1914, 40,999 Japanese arrived in the United Nates and 35,415 departed; in the same interval 23,071 Chinese arrived and 20,496 departed.

Figures recently compiled show that and desperate, he is still master of him-the present population of New York is self, the rider of the beast of his own estimated at 5,533,537, this being in increase evil desires, and that he will, through difficulty, attain the heights. in four years of 536,064.

The Russian empire has an area. including internal waters, of 19,155,587.7 versis, or 8,417,118 English square milesthat is to say, one-seventh of the land surface of the globe-

same curves, the same stripes, the same baster-like material, stained with tints ing the stimulation of plant growth by in- graceful spirals, mounting to a delicate of indescribable beauty.

crease of carbon in the earth's aerial finial, the same proportions, the same envelope. But a rew quantitative facts manner of turning the whorl of the ceed, in beauty of coloration and delicacy

turn, and every slope and shade of curs vature, is the same at the end of a mil-

Many shells equal, if they do not ex- Hon years as it was at the beginning. But give those substances to another of form, the finest products of the floral mollusk and its vital forces impart a That mysterious thing called life, mani- world; they had these characteristics, very different form to them, but a form

Discipline as First Aid

BY BEATRICE FAIRFAX.

A great many philosophers allow for the fact that-

"It is easy enough to be pleasant When life flows on like a song. But the man worth while is the man who can amile When everything goes dead wrong."

But they seem to omit one important fact-just as well worth considering as how you take discipline as why discipline

is offered you. Life seems to offer hardship, suffering and difficulty to the people who can bear

new power to bear and endure still more. drawn anywhere-is eight inches at the face of sorrow and becomes a pleasant

Dear Miss Fairfax: I am 22 years old nd deeply in love with a girl of 20 years, ince this European struggle she seems Since this European straggle ble seems to ignore me, as our nationalities differ We are about to be engaged, and I ask your advice if it would be advisable to do so, because trouble may arise be-tween the after our marriage, owing to our nationality? E. B. G. S. than endure the painful process of havtooth sacrifices the tooth itself, and go-You and your sweetheart are both Hy-

fight to conquer his weaknesses, we have a world of women who suffer through Don't bring racial differences into the

Eventually, the girl who sacrifices he teeth rather than suffer the pain of having them treated has all sorts of un timely dental difficulties, and the woman who is too impatient to help her beloved onquer his weaknesses, and so hastily puts him out of her life, brings on her self unhappiness which a nature dis ciplined to be patient and endure would

A recent novel suggests that the 'fates'' wouldn't bother to pile suffering after suffering on the hero's heart un ess "they" had felt that he was worth making into a great, strong, fine man. After losing everything he values in the world-friendship, companionship, love, the gift of writing popular novels, his faith in his own power to achieve, his trust in his wife, his pride in his son, and his hoyish conception of his father as a man big (if only for evil)-be comes at last, stripped of everything, to the mountain tops, and there he knows that, standing empty-handed, uncompanioned

to make you endure, remember this; of life. Some day when a great omer-Discipline is only given to people who are gency arises, if you meet it well, it will strong enough to endure it. Some power be because strength has grown in your is actually offering you a compliment heart in a "cumulative mass" due to all when it puts you to the acid test of suf- the lesser emergencies you met bravely. fering. This is the practical side of dis-Some day when a great responsibility is cipline, and it points the way to the offered you and you are able to fill the spiritual one: "Whom God loveth He position, it will be because you measchasteneth." ured up to a series of responsibilities.

Out of every sorrow you meet and en- No one resents growth, and the great dure bravely grows new power to en- est "first aid" to spiritual, mental and dure, new strength to meet the demands emotional growth is discipline.



Leave the War Out.

Don't be slily enough to drag the conflict into your own lives.

Mercenary Marriages.

Mercenary Marriages. Dear Miss Fairfax: If a young lady cares for a young man who is poor, but honest and loyal, should ane wait a while or should she take her mother's advice-turn him aside, give up the idea of love and consider her men friends as 'chances' and marry the first one who offers her a good, comfortable home, a man she respects for his good qualities, but does not love as she can the poorer one? SINCERITY. A girl certainly should not marry for ing in a country that is mercifully removed from the and European struggle.

peaceful life you are permitted to lead A girl certainly should not marry for ere. Be broadminded enough to pity mercenary reasons, nor should she measall the warring nations, to feel that you ure men by their eligibility and power to share in the sorrow of all these suffering buy her the comforts of life. However, copies, and to find sympathy for your no man who really loves a girl should inweetheart in her nation's calamity as fluence her against her mother. Rather, well as your own. The war has nothing be should try to win over her mother to to do with your love and marriage. faith in him and his future success,

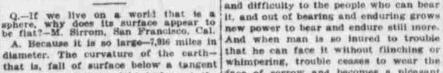


have avoided.

and suffering is to make us all strong. The way to endure this discipline is, of course, to smile, however "dead wrong" everything goes. But as a basic principic to help you smile and as an incentive

The reason for the discipline of sorrow

lack of self-discipline.



shell, now right, now left, or reversed. and figures may be here given. One cubic mile of coal, the average of the different varieties, weights 6,534,000,000 festing itself in the gelatinous bodies of countless centuries before man came that is equally the result of an enduring tons. And 7,400,0000,000 divided by these shell-making mollusks, has, for un- upon the earth to appraise and appreci- tendency.

this number equals 1,117 cubic miles of coal available to man, according to Mr.