THE BATTLE OF THE SQUASHES

By Shirley W. Smith.

"TRULY, I can't stand it another day, not another day, Edson. Those things must go."

The look that Miss Charlotte Greenfield cast across the desk at her lawyer brother was appealing, however, rather than determined.

"I can't step to the front window without seeing the wretched place where the lawn should be, not an hour passes, when I'm where I can hear the people say as they go by, that I don't catch some gibe at those awful vines. Father doesn't care; he likes being obstinate and holding out against the ridicule of the whole city almost as much as he likes the vines themselves."

Edson was still silent. Prim little Miss Carlotta wiped her eyes with a tiny lace handkerchief, as she thought of the beautiful boulevard with its numberless stretches of lawn—soft, smooth green lawns save only in front of the house where she lived with her father. There old Boston Greenfield had insisted on preserving a relic of his three score years of farm life, and had planted every square yard of earth to—squash seed.

"It is truly awful to have the best people of the city continually laughing at one. I just can't stand that. Day in, day out, those lubberly vines are sprawling about in front of the house. They seem to know they are out of place, and they grow over the walks as if begging some kind foot to crush out their ridiculous lives. Father hoes and waters them no matter who may be passing and he bickers with the boys and rough men that sauce him, in a manner as rude as theirs."

Edson's glance was sympathetic in spite of the twinkle in his eye.

"I suppose you could tell him that you won't stay with him any longer," he suggested. "Or, I might do the job for you if you don't feel equal to it."

"Hush! You know I'd never do that, or let you do it. But—I even heard John laugh at the sight as he passed our house last evening. I thought I should cry—and I did cry."

"No, dear. I know that you'll stand by father. His whimsies balanced against your love of him couldn't even start the scale. But what I'm afraid of is that if I find some way to get the truck farm out you will be moved straightway to help him put in another."

"Just you try me! But he's our father, and he's been good to us, and he's old, and I almost think we are wicked not to leave him in peace with his vines. If people would only let us! Edson, if I thought I needed your word for it that you wouldn't hurt his feelings in this matter, you'd have to promise."

In a short time the parties to this treaty of offense and defense had arranged certain of the most important details, and then the sister left the office. Later in the morning, after he had finished his dictation, Edson took up his pen and scrawled a hasty note. Then he sent off the missive by a boy, and went on with his work.

Their Friend, the Enemy.

This same morning Boston Greenfield was in the basement of his residence pulling on a pair of blue overalls. The operation progressed more and more slowly. Finally it stopped altogether.

"Mebbe I hadn't better wear 'em, after all. Charlotte don't like 'em, and I guess I can give in that much. I'll jest hoe them squash in my good clothes; I don't care if they spile 'em."

And with like cheerful abuse of the republic's English he talked on to himself as he pulled off the blue overalls and stood once more in his ordinary black corkscrew suit. His habit of talking to himself had been formed in the solitude of the old farm fields.

He was a tall old man and his features and his figure marked him as one who had been a leader in his own little sphere. Men with eyes like his don't take orders; men with lips like his don't give orders except to be obeyed. His face, clean shaven, except for a protecting apron of beard depending from his throat, and the backs of his hands and wrists were tawny, red with long exposure to the wind and sun. His age showed itself only in his ragged white beard and in a slight stiffness and slowness in his movements. There was no weakening of the facial lines and no dimming of the glance.

Now he passed out the rear door of the basement, and, picking up a hoe that stood there, walked toward the street. An expression of satisfaction overspread his face as he surveyed the premises.

"I dunno, I swan, as I ever see finer squash at this time o'year," he mused. "Hubbard, at that. I wouldn't have thought that this little patch of ground could have produced so many. But then, 't taint never been worked out."

As he was meditatively loosening the earth about a squash hill a grocer's wagon drew up in front of the house and its young driver jumped out with his basket and ran toward the rear door. He was [illegible] from the country himself and the sight of the well-worn hoe, and the smell of fresh soil halted him in his way back to his wagon.

"Gee, [illegible] these things make me think of [illegible]."

"So do they me," said Boston warmly. "[illegible] If Stubbs [illegible] for killin' [illegible] time here, I cal'late [illegible] enough to him to set ye right [illegible] down, and look at [illegible] and pass the time o' day with 'em. Ye'll work better for a sight of friends, tell Stubbs."

The boy [illegible] he didn't sit down. He gazed [illegible] up and down the street, as [illegible] by the ever-watchful Stubbs.

"Set down on that barrel, I tell ye," commanded Boston. "[illegible] down there, and jest let the essence of rest run through ye. [illegible] like [illegible] farmin' rests ye."

The boy nervously sat down.

"Sometimes," continued Boston, "I most wish they hadn't struck ile on the farm. I could have had acres where I've only got square feet growin' now if them wells hadn't elbowed me off'n the place. It does seem as if there couldn't be nobody that liked to see things growin' so well as I do. Not in the hull world. I want good active growin' veg'tubbles 'round me as bad as a dog wants a bone. And there aint nothin' in the hull world that seems to appreciate good persistin' and liberal culture like a vine squash in p'tickler."

The old man hoed steadily as he talked.

"Corn, now, grows fast, and it's good for sore eyes to see a 10-acre field of corn all a-wavin' and sort of marchin' standin' still. But 't aint hardly a suitable crop for a little checker of ground like this'n. The year I had corn in here the place looked a'most topheavy. Beans is putty fair in some ways—them that don't need no pole that is. But there's a sort of sameness to different hills of beans. I can't reely say I cotton to 'em like I do to a squash."

For a moment Boston stood upright now, and his eye swept the street defiantly as though longing for a sight of Stubbs that he would at the end of the hoe-handle if necessary, make that grasping tradesman promise to send the delivery boy daily for recuperation among the vines. Then he beat over his hoeing again.

"For there's some inn'vidual'ty to a squash. Ye can look at her once and sort o' get the general hang of her features, and then ye know her alwus. She'll grow and her complexion'll change some, jest like any sensible critters. But she's jest the same squash, and reckenized as sech by any one with ekal gumption. I cal'late squash to be 'bout the best citizen we have 'mong veg'tubbles."

Moving off toward the sidewalk, Boston uprooted a tiny pig weed venturesome enough to attempt growth in this well-guarded plot.

"Grass now, is all jest as much alike as the hair on a bay hoss. And yit, m'son, every scalawag along here but me thinks grass is the only thing a man ort to put out in his front yard. That's all right. If their light gives 'em to see grass why let 'em have the sight of it in peace. But"—and Boston paused impressively for a second, "my light shines on squash, and I shall see 'em clear."

In the excess of his righteous indignation against the narrow and superrefined, a stroke of his hoe, forcible and careless severed one runner of a thrifty vine. For a moment he gazed at the ruin in paralyzed silence. Then angrily:

"Well, I swam to goodness, if I ain't done it now. There's one of the best squash under this gov'ment broke right in two before she's fairly got started. I've up and done more myself to discourage these vines in puttin' forth their best efforts than all the laughin' all through the summer. Judas"—and a tinge of pathos altered his tone—"it seems as if my hand must be gettin' too onsteady to properly move a hoe. If 't is the sooner I get where my blunderin' can't harm nothin' the better."

The frightened boy knew not whether to go or stay, to offer sympathy or to keep silence. Oblivious to all else, Boston held the severed vine in his hand by its half grown fruit, and surveyed it tenderly.

"I feel as if I'd swindled an orphan. There's three good squash cut right off in less'n a second. They must know what I've done. And all the rest of 'em must know it, too, and be kind of 'fraid to have me come round amongst 'em. Poor garden little things. Who'll say what ye might have been if ye could jest have finished the work ye laid out to do. Ye most ort to be buried like a human. Ye had, reely. I swan, I dunno where I'd put ye, though. All the land I got here's under cultivation. I reely—Say! I'll jest take ye right into the house and lay ye 'long the frame of that there Angelus picture Charlottie give me my last birthday. That'll be doin' the right thing by ye, so far's I can, a-givin' ye a chanst to make yerself a joy to the sight of men for a few weeks longer."

And as the forgotten boy drove off in a frantic effort to make up for lost time, old Boston, with his disgraced hoe in one hand and the blighted squash in the other, made his way toward the house at a most funeral pace.

FASTER AND FASTER HE LABORED.

The First Gun Is Fired.

"Dear Father—You know Ellen and the children are out of the city for a few days, and I am already getting tired of eating without some member of the family beside me. I wish you would come down and go to lunch with me today. We'll have a table all to ourselves and enjoy a good old-fashioned talk together, such as we haven't had for a long time. Yours affectionately, ED."

Strategy.

At 1 o'clock that day son and father entered a private dining room at the La Salle club to partake of "lunch." But such a lunch. Instead of the combination of salads, cold meats, patties and fruit that Boston had rather gloomily anticipated as he approached the place, there was an outlay that had well nigh cost Edson his reputation for sanity with steward, chef and waiter. Everything was on the table as the host and guest entered. There was to be no tedious clearing of the board and bringing on of fresh courses. The waiter left the room with instructions to close and door and to appear only when summoned.

The atmosphere of martyrdom which had so far shrouded Boston's demeanor, when once he had surveyed the scene, was swept away by a burst of sunshine. His exercise of the morning had given him a ravenous appetite, and now there lay before him in all the beauty of abundance a table that recalled the days when threshers came to the farm. There was a platter of ham, with an even half dozen fried eggs lying like so many low, broad islands in a sea of grease. Here was a dish of snowy mashed potatoes, so white and flaky that by no possibility could a single lump be left uncrushed. Seven or eight baked and bursting tubers were close up, with a bowl of buttery flour gravy just beyond them. An old-fashioned dish of yellow stoneware was heaped up with pork and beans—the pork not too fat and every separate bean glistening as though its tawny coat had been drenched with nectar. There were plates of soda biscuits, and of "Injun bread," and white, "salt-rising" bread. And, glorious sight in these degenerate days, there reposed on the table at the start a whole pie of apples, and another of "pumkin"—down with the Philistine that first pronounced it "pumpkin." And besides there were marble cakes and sponge cakes spread with currant jelly and then rolled up. Coffee had not been forgotten, and finally there were two clay pipes and some of the blackest Perique tobacco that Boston had ever seen.

He turned on his son with real tears in his eyes and a real tremor in his voice.

"Edson, what's got into ye?"

"I don't know, father, but I know what's going to get into me as soon as we ever get started. Hurry up and sit down before all this stuff gets cold."

Outside it was burning hot, and Edson had expected almost to shudder when he should come to look upon the food he had ordered. But strange to say it was quite otherwise. He felt as hungry as ever he had felt in the past when he had come in from the hay field to devour just such a heat-producing mass. Dyspepsia or not, he would eat all he wanted of it. The blood of the old days was stirring in his veins—the days when he could pitch hay off the wagon into the mow or onto the stack in forkfuls that would bury the best man in the township.

"By George, I'm going to eat in comfort for once," and he tossed his frock coat into a corner and sat down at the table in his shirt sleeves.

Speechless with delight, Boston hurled his cutaway after the frock.

Edson was cutting off a great section of rosy ham, when he suddenly put down his shop knife and touched the bell. The waiter appeared, bowing, and doing his best to seem oblivious to the wonder before him.

"John, go down to the kitchen and get each of us a steel knife and fork. Never mind if they don't match. Hurry, please."

As the man went out, Edson felt moved to a silent and immutable vow that his recklessness should not lead him to carry food to his mouth by means of the most tempting steel knife that fate might place before him.

They ate every egg and most of the ham; baked potatoes and mashed were cleared away, beans, pie and cake fared hard as ever at the hands of hungry men, while Boston declared that the Injun bread carried him backward 25 years. Over the coffee and Perique reminiscences of the past came freely.

The accident at Ansel Taylor's barn-raising, the time that Edson alone swamped Sproul Curtis, the fastest bundle-cutter among all the threshers of the district, Boston's setting the hired man from the city at work loading the needle-barbed barley, the dances at the Center to which the whole family used to go, the night the sugar shanty was struck by lightning, recollections of all these and many more than these were transversed to their utmost delicious limit.

Then with changing emotions they talked of the departure for the city of son and daughter, and of the discovery of oil, of the death of the wife and mother; these, the old things that had broken up the old farm life.

"There ain't hardly a day, and never a night passes, Ed, that I don't think of her, and wisht she was here," said Boston, as he stroked his face between his withered brown fingers and thumb. "And yit, I can't be very sorry that she's missin' this city life. She couldn't have took to it any better'n I do. Besides, I've got Charlottie, and she's her mother's pi'ture right over again. She's pudgicky and hard to manage sometimes, but I cal-late she's more'n good to me. Her ridic'lous notion of alwus findin' out what crops others is puttin' in afore she sows hern, is hard to git 'long with oftener'n most would s'pect. But I've made it a rule never to give up to any ensensible crotchet, feelin' that mebbe she'll weed 'em out after a while if we give her time. But I admit it's been middlin' hard standin' out now and then when there ain't been nothin' in it but principle. And sometimes it does seem as if her best friend would have to admit that she's gittin' worse 'stid of better. But in spite of all them catty notions she's li'ble to git into her, she's the best disp'sitioned, kindest-hearted girl that ever stood up. I dunno what I'd do without her. She made a home for you 'fore ye got one of your own, and she's made one for me sence I lost mine."

"And we know at what cost to herself," observed Edson.

"Why, no, Ed; I paid all the bills. I been lib'ral, I'm sure."

"I don't mean that; DeCourcey would marry her any minute she would leave you."

Boston's pipe was shattered on the floor.

"John DeCourcey? Honest. Does he like her? And she him?"

"Yes," to all four. "You don't mean to say you didn't know?"

"Did'nt know it? Didn't know it? I tell ye, I don't believe it. 'Taint so."

"I know about it and I know it is so."

"Wall, I s'pose if ye know ye know. I'll have to believe it. But I'd never s'pected it. He don't come there so awful much any more. And she never said a word. I never had any idee she'd been ast. Ain't she the girl, though! Edson, I ort to been told of this."

"Perhaps I should have told you. What I did, instead, was to tell her that you would be happy with Ellen and me and that her duty was to herself. But I found out that her greatest happiness lay in living for you so far as she could. She'll be happy with you and with no one else so long as she thinks she can be of any use to you."

The father sat without speaking, his elbows on the table and his chin resting in his hands. Edson had not been merely playing a part; he had been wholly sincere in his enjoyment of the occasion. Yet he had not forgotten the object he meant to gain. "He'll do it now, if ever," he thought, and he went forward confidently.

"There is one way, father, in which I think you could make Carlotta's life happier than it is—much happier. I have rarely heard her speak of it, but I am sure if you could bring yourself to give up your garden at the house—give it up willingly—it would please her more than anything else you could do."

As he listened to these words the iron grip of passion wrung every vestige of sadness and sweetness out of the old man's face and attitude. He was Boston Greenfield still, loving his life work, rigid in whim as in principle. He sprang to his feet as though someone had touched a controlling spring.

"Edson, you ain't nigh so sharp and crafty as you thought you was," he roared, looking straight across the table. And then he picked up his coat, and opened the door and slammed it behind him before his astonished and troubled son had moved from the chair.

The Battle.

All that afternoon the old man wandered about the city, now in the parks and then on the thoroughfares. Sometimes he was on foot and sometimes in the cars. Passersby might have heard broken words and sentences forced out of his surging heart by the struggle going on there.

"Don't seem as if she could care like I do. Seems as if she'd like it, too. I can't bear to see 'em rooted out. It's like the murder of one child to please another, a'most. Nobody else must teach 'em anyway.

"They'll all say the old man's had to give in at last. That his sperit's broke. 'Taint so! They hain't forced me! I do what I do on my own free will and grace. But can I do it? Good as she is, can I give up this much for her? The last little bit of all my farmin'."

Defeat—or Victory.

It was long after dark when Boston finally pulled himself up from a bench and hurried toward the boundary of the park. He took the trailer that would cross Shadeland boulevard near his home. When at last he had left the car he stole along the deserted street like a conspirator. He skulked in the shadow of the buildings and trees, and when he had to pass under an electric light he bent his head and pulled down his hat while his knee joints cracked in his haste to get beyond the glare. On coming into the block that contained his house, he stopped every few steps to peer at the buildings, as a cat studies a strange room before she ventures in. Then his frame relaxed for a moment in a sigh of relief. The Greenfield lawn caught but a ray or two of moonlight and there was no light at any window.

But now came the supreme moment. His muscles grew tense again.

Sternly he forced his unwilling legs to carry him into the midst of the vines. There he stood, surrounded by those lusty, trustful brethren of his. His eyes were tight shut; one glance around would lose him all. For a second he faltered, but only for a second. Then with an agonized groan he suddenly stopped and jerked out by the roots the first vine his hand could clutch. His eyes were open now, and tears were streaming down his dusty-stained cheeks. But stern as Abraham on the mountain top in the land of Moriah, old Boston stood up to his work. Faster and faster he labored till his haste was desperate.

And just before he completed his task, Carlotta stole softly upstairs from the window where she had been awaiting her father's return and from which she had witnessed his destruction of the vines.

The Masterly Retreat.

As she descended the stairs next morning she heard her father bounce out of his chair and begin striding up and down the library in a most violent fashion. When she reached the doorway she found him in a rage, fearful to behold. She could not but notice, however, that the morning paper lay wide open by the chair in which he must have sat reading calmly enough until he heard her step.

"Why, father, what—what?" she faltered.

He stamped his foot; he looked about him in silent fury; and then like whole batteries of big guns and little guns, his emotions exploded in words.

"Jest you go out there in front, will ye, and see what vandalianism this law-abidin' neighborhood has perduced. Then ye'll know what without askin'. I swan, if I ever come up with the reptiles that do that I'll land 'em over the road as sure's I'm a sinful man. Why, when I got back last night, there them squash laid jest as calm and peaceful as Heaven, and where be they now? Jest look at 'em, and tell me where they be. I'll lay this 'fore Edson—and the p'liceman if I can see him. Wall, I swanny!"

And Carlotta showed her mettle. She hastened to the window and stood as one wholly overcome by the astounding spectacle that lay before her. Then, when lack of breath brought a moment's pause in her father's outbursts, she was ready—and the fire in her tones was something wonderful.

"Good heavens, father, I never heard of a more astonishing thing in all my life!"

"I guess ye ain't! Nor nobody else. If that ain't an argiment for cap'tal punishment I dunno where ye'd go to look for me."

"I wonder if they'd tear up other things you might try to raise?"

"I dunno, I dunno," he replied, with a surprising falling off in the passion of his tones. "But they won't git the chanst. There's one injunction of scripture that I'm goin' to obey to the letter after this; I ain't goin' to cast no more pearls 'fore swine. When I git to feelin' that my squash ain't safe from the crim'nal classes of this fash'nable, and at the same time wicked city, I can't take no more comfort a-raisin' 'em. It's too anxious business. I'm through now. We'll git some grass seed and put it out and then mebbe we can feel safe from such hounds with suthin' tain't worth techin'."

And to the undying credit of Carlotta Greenfield's judgment be it said that never did she seem to suspect that the slaughter of the squashes was aught but one of the most dastardly crimes ever perpetrated against the peace and dignity of the commonwealth of Ohio.

CAN YOU TELL THE WHOLE TRUTH?--Continued From the First Page of This Section

cloth had made, evidently, too slight an impression on my consciousness. My imagination gradually substituted the more usual method of packing with wrapping paper, and I was ready to take an oath on it until I went back later at the end of the summer vacation.

"In the same way I got a vivid image of the candle droppings on the floor, but as, on the moment of the perception, no interest was attached to the peculiar place where I saw them, I slowly substituted in my memory the second floor for the attic. My other blunders clearly arose under the influence of suggestion. The police and every one about the house had always taken, as a matter of course, that the entrance was made by the cellar window.

"In this way, in spite of my best intentions, in spite of good memory and calm mood, a whole series of complexes of illusions of forgetting, of wrong conclusions and of yielding to suggestions was mingled with what I had to report under oath.

My only consolation is the fact that in a thousand courts, at a thousand places all over the world, witnesses every day affirm by oath, in exactly the same way, much worse mixtures of truth and untruth, combinations of memory and illusion, of knowledge and of suggestion, of experience and wrong conclusions."

Is there, then, any way by which puzzled judges and juries may winnow the grain of truth from the chaff of evidence; may [illegible] conflicting statements, or at least determine the actual facts from the statements of witnesses? Can they [illegible] what evidence is true and what [illegible] in mind all the [illegible] statements may be [illegible] as well as intention[illegible].

Psychologists, in [illegible] bring forward the [illegible] of ideas.

We know that a [illegible] a name or a name reminds [illegible] one thought in [illegible] up the other from [illegible] place. Say "rose" to a person [illegible] of the flower [illegible] to his mind [illegible] of boat, [illegible] will be of [illegible].

Such suggested [illegible] upon the mind by [illegible] number of words [illegible] idea is quickly formed [illegible] thing, the word expressing the associated idea may be uttered as quickly as connection can be formed between brain and tongue.

By means of little electrical instruments held between the lips and a clockwork is made to register to the thousandth part of a second the [illegible] in the current made by movements of the lips.

"My index," says Professor Munsterberg, "stands quietly until I move my lips to make, for instance, the word 'dog.' In that moment the electric current causes the pointer to revolve. My subject, as soon as he hears the word, is to speak out as quickly as possible the first association which comes into his mind.

"He, perhaps, shouts [illegible] and the movement of his lips [illegible] the current, stops the pointer and thus allows me to read from the clockwork in thousandths parts of a second the time which passed between my speaking the word and his naming the association."

Included, of course, is not only the time necessary for the process of association in the mind, but the time required for the ear to hear the word and convey it to the brain, for the brain to comprehend and to reply and for the physical effort of speaking.

All these smaller periods are readily determined by the expert, who also measures the time it takes if the subject does not associate anything, but simply repeats the word given him. If the simple repetition of the word "water" takes 400-1000 of a second while getting out the word "boat"—an associated idea—takes 750-1000, the difference of 350-1000 is necessary for the mental processes called upon in making the association.

Now suppose a man charged with some crime is submitted to this test, that he be asked to respond, as speedily as possible, to, say, 100 words, giving for each the associated impression made on his mind.

He may start out readily enough replying "pipe" to "tobacco," "flying" to "birds," "trotting" to "horses," "tent" to "fire," etc.

But scattered through the list of 100 words are a number that suggest danger to him, they bear in some way upon his crime. When one of these is pronounced there is an involuntary hesitation as his mind quickly searches for a reply that will not seem incriminating.

A test made by Professor Jung of Zurich will serve as an illustration. A young man of education and good family was suspected of being a thief; money had been taken repeatedly from a trunk and a drawer in the home of an uncle with whom he lived.

Professor Jung got the young man into his office under the pretext of making a medical examination, and during the examination and seemingly as part of it proposed a list of 100 associations.

When the professor said "head," for instance, the young man promptly responded with [illegible] as the associated [illegible] "green" brought "lime," [illegible] brought "short," "wool" brought "cloth" and so on.

Scattered through the 100 words, however, were 37 that were dangerous, [illegible] had to do with things in the [illegible] where the money was stolen, or with the theft and the punishment of such a crime, or with possible motives.

In responding to the innocent words the young man's replies came quickly, the average time required for uttering the associated ideas being 1.6 seconds. But the dangerous words required a longer time for the expression of an association.

When the word "thief" was given, the reply, "burglar," seemed natural enough but to get it out the young man took 4.6 seconds, whereas all the preceding ideas had been expressed in the average time of 1.6 seconds.

In the same way, "theft" in response to "police," required 3.6 seconds, and "penitentiary" in response to "jail," required 4.2 seconds.

The expert through a subtle analysis of the words given, the replies made and the time periods involved in the answers, was enabled not only to form a clear conclusion as to the young man's guilt, but to judge with very near accuracy what had been done with the money. When he explained his conclusions to the young man and told how he had arrived at them, the latter confessed all.

An innocent man, it is asserted, will not stumble mentally over supposedly dangerous words, if there is no consciousness of guilt in his mind there is no hesitancy in forming and expressing associations for words having to do with things connected with the crime.

Modesty a La Mode.

I saw her in her bathing suit beside the placid sea;
I was her latest, raw recruit, and she looked good to be.
We chased each other on the sands and splashed without a care.
I held her up with willing hands what time she paddled there.

I've seen her in her ballroom gown where all was gay and bright,
And feared her waist was coming down, though she was free from fright.
I trembled lest the shoulder straps that lopped down on her arms
Might slip or break and cause mishaps, unmasking all her charms.

I've seen her romping on the shore, I've seen her waltzing, too,
Each half of her to me, therefore, has been exposed to view.
She is a gentle, proper [illegible] deem her still sublime,
For modesty she has [illegible] but one half at a time.

A palm which grows in South America has a leaf measuring 50 feet long and 12 feet broad—the largest in the world.

IS BRAIN-FAG INEVITABLE--By J. Cater, M. D.

ARE periods of "brain-fag" inevitable, or do they result from extravagant misuse? What takes place when the mental faculties are actively engaged, and what is the process which involves the condition of so-called "fag?" An attempted solution of these problems in the light of modern science forms the subject of the present article.

An essential element in the composition of brain matter is a soft, delicate substance known as protoplasm. Protoplasm forms the physical basis of life, and enjoys the inherent power of reducing itself. It is divisible into extremely minute particles, each of which is technically termed a molecule; and because the integrity and properties of a substance reside in its molecules, our thoughts must be directed to molecules of the brain.

As the brain proceeds with its work, a greater or lesser quantity of its molecules becomes impaired, their vitality is so seriously affected that they are rendered incapable of further service. In fact, by the performance of their normal function, they bring about their own destruction.

Evidently, then, molecular waste of this kind, if it continued without adequate compensation, would eventually terminate in terrible disaster. A time would arrive when insufficient molecules remained to carry on the brain's work. Happily for us, such a dire calamity may easily be averted.

Infinite wisdom has ordained that reproduction should closely follow exhaustion, consequently used-up molecules may immediately be replaced by others of new formation. Given certain molecular destruction as the necessary consequence of brain work, instead of the organ remaining impaired, the damaged parts are instantly made good.

Every vacant place caused by decease of a used-up molecule is quickly occupied by another one newly formed, the fresh tenant being the natural outcome of fertility on the part of molecules remaining intact.

Now, assuming a thoughtful reader to be engaged in contemplating these facts, a dual process of destruction and repair is actively proceeding in the substance of his brain. Each idea that strikes him, every thought he entertains, all definite efforts of his intellect, cause the breaking up of some of his brain molecules. Yet this apparently wholesale destruction is promptly followed by a birth of fresh particles, and the new constituents take the place of their deceased prototypes. Reproduction is carried out with such speed that the brain is enabled to proceed with its work.

Under normal circumstances, the disintegrating and reproductive forces exert themselves uniformly, and to a fairly equal extent, so that no ill-effects are experienced from ordinary and reasonable use of the mental faculties. But in circumstances where an even balance cannot be maintained, there is occasion to fear lest serious complications may ensue.

While the existing conditions of life continue, and our habits remain what they are, the desired equilibrium can only be secured with difficulty. Waste of structure proceeds at a greater pace than the work of repair.

The brain forces are called upon at times to make a prodigious effort, or they are goaded by anxiety to complete a difficult task, or an occasion arises when thought follows thought with unusual rapidity, precluding the possibility of sufficient reproduction to counter-balance the waste.

Clearly, in any such case the places of used-up molecules cannot all be filled by fresh ones during the course of a few hours' sleep. Therefore, brain work of this kind continued for any length of time reduces the number of working units, and renders those available for use too feeble to carry out the necessary repair.

Hence, when brought to this pass, a man is practically on the verge of mental bankruptcy. The losses sustained are beyond his powers of recuperation. Nature warns him by a profound sense of mental weariness, suggesting complete cessation of work and extension of the period of repose. Assuming the needed rest is secured, and the destruction of molecules has not gone too far, the reproductive forces again exert themselves, and the brain is permitted to resume its work.

During our conscious life the molecular waste is always in excess of the repair. Each day's toil results in an appreciable deficit. During sleep the opposite is the case, for then reproduction is carried on with rapidity, the work of demolition being practically at a standstill. Therefore, if a reasonable amount of legitimate work and natural sleep could always be secured, no such thing as mental breakdown would ever occur. The loss resulting from each day's labor would be compensated by the succeeding night's rest.

Cases of indiscretion point more or less directly to the nature of the condition so frequently described as one of "brain-fag." The condition itself is by no means inevitable, but is often the outcome of extravagant misuse. The instances of wrong use demonstrate in the plainest manner what measure should be adopted if we desire to avert the more serious state of things, absolute mental collapse.

An active agent in the production of "brain-fag" is habitual excessive excitement. Excitement in moderation is permissible on special occasions, since it accelerates the speed of the mental machinery, and serves to increase the output of work. To go beyond moderation, and rely on the stimulus of work in a given time, involves an enormous destruction of the brain molecules, and ordinary measures of recuperation are unequal to the task.

And any sudden jolt from one mental state to another, followed by a similar jolt back again, operates like a shock to the nervous system, inflicting heavy penalties.

A potent factor, contributing largely to loss of brain power, is over-indulgence in pleasure, usually classed as alcoholic and gastronomic. Overeating and excessive drinking are responsible for more cases of mental breakdown than all the extraordinary efforts of which our mental faculties are capable. Nor is the reason for this far to seek.

Like every organ of the body, the brain depends on the blood for supplies of suitable nourishment. When this fluid is laden with waste products from excessive feeding its circulation fails to distribute an adequate amount of nutriment. And, what is more, not only is there deficiency of nutrition, but the refuse of excessive acts as poison in the system, a share of which still further depletes the already enfeebled brain.

In conclusion, it may be said, the brain's condition is largely subject to the worker's control. Its use or abuse being determinable by its owner. So long as he confines its working to what is legitimate and natural, and his habits are regulated by reason and good sense, "brain-fag" is highly improbable, and actual breakdown will never come.

EVERY MAN MUST TEND TO HIS OWN JOB
By John A. Jayne

DOWN on Fourth avenue in one of the office buildings there is a bright young fellow, aged about 28, who for the last 12 years has been steadily working his way upward and forward. He started in with his people at the age of 16 as office boy and envelope opener. He had graduated from one of the business colleges and had expected that the world would fall all over him as soon as he knew how to take 60 words a minute in dictation and could speed out a fairly well written letter on his machine in short order. He had been told that "the world waits for the young man." But he had to learn that while the world waits for the young man the young man has to wait while the world tries him out. For a few months he hunted for a gentleman's position as stenographer. At last he took, and was glad to take, a chance in the office where he now is. There, one never-to-be-forgotten day, he learned the lesson that every man must tend to his own job. He learned that the world and all humanity has no use for a butt-in. That the world and all humanity abhors a butt-in, and it matters little how honest the butt-in may be in his purposes he is still regarded as a butt-in.

Learning that lesson, mastering it, making it his own, he has come from the ranks of the office boy at four per [illegible] to a position where there are three ciphers before the period that marks the cents denomination, and in front of it all a queer crooked figure that under no circumstances could be taken for other than the 5 that it is. Asked the reason the other day as to his advancement, he said: "I learned early that every man must tend to his own job."

In the field of your acquaintance with men there are doubtless some who are physicians. Men of sterling character and upright life, who have made a success of life. Men who, while ministering to bodies diseased, are also ministering to minds diseased and depraved and helping men to a better life. This is the story of a physician who came to this city 10 years ago. He was not a graduate of a popular college. He had not taken a thorough collegiate education before commencing the study of medicine. In his home town, because of a number of boyish scrapes into which he had gotten, he was in disrepute among the staid old fathers of the slow, sleepy place in which he lived. One morning he awoke to the possibilities of his manhood. He put aside as a worn-out coat his boyish foolishness and settled down to the run of life. He took two years in an Ohio college, then four years in a medical school and graduated about the middle of his class, with a borrowed suit of clothes on his back, a debt of over a thousand dollars, lots of pluck, energy and nerve. When he reached this city he selected as his location a strong, healthful, hard-working community. Many a time he walked around to the long bridge so as to save the penny it would take to cross the other. His first year netted him $400 in cash, a number of dead-beat names on his ledger, a healthful appetite, a ragged pair of pants and an experience invaluable and a love for his work most wonderful. Slowly but surely he began to climb. He had to fight prejudices, slander, and after his marriage, trouble in his own home. About four years ago, after eight years of hard work, he found himself in a position to launch out into larger things. He is still the physician of the poor. It is said of him that no man or woman ever asked for his help, telling that they had no money, but what he gave the best care and attention that he could. It is said, too, of him that he is a remorseless collector if he believes any are trying to "do him." In these 12 years he has specialized his work. He still lives in the same location where he started. Not in the one room, however, but in a comfortable home of his own which today stands without a mortgage or incumbrance of any kind against it. He is loved, honored and respected. Asked the other day relative to his success he made reply: "I have just attended to my own business, and worked like the devil. That's all."

"Genius," says Mr. Edison, "is 2 per cent genius and 98 per cent perspiration." The man who aspires, and at the same time perspires, and makes all his energy tend in the one direction, is the man who is going to win out. Winners are not born, neither are the creatures of circumstances; they are the men who tend to their own job, mind their own business, the while putting first things first and measuring each day as far as they can to the level of their best.

The mapping of the United States by the geological survey has been in progress since 1879, and so far somewhat more than a third of the country has been surveyed, or about 1,050,000 square miles, exclusive of parts of Alaska.