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TO INVENTORS.

Commissioner Foote, after a few weeks' rest, has returned to his duties, and inventors may look for a more speedy disposition of their cases. Serious, and well-grounded complaints are coming to us concerning the delay in the examination of cases.

Now is a favorable time to enter applications, and inventors will find the SCIENTIFIC AMERICAN AGENCY ready to attend to the prosecution with the greatest dispatch. By reference to our register, we find that we have made upward of twenty thousand preliminary examinations into the novelty of alleged new inventions.

We give opinions free, and all we require is a rough sketch and description of the invention.

Inventions patented through this Agency receive notice in the SCIENTIFIC AMERICAN.

OVERWORK AND UNDERWORK.

The majority of mankind need no caution against overwork. Where work kills one, the want of work kills ten, the fires of passion consume twenty, sinful indulgence destroys fifty. In cases where work seems to undermine health, it is not so often that the labor is too much, as the faulty way in which it is done, the spirit in which it is performed.

It were easy to get a hint that would lead to the real truth—if the same superficial observation did not prevent it—from the exceptional cases; the men whose brows are sunny and unseamed; whose laugh is hearty and ringing, notwithstanding they perform an amount of work which seems almost incredible to those whose own toils are so onerous that it passes their conception how flesh, and blood, and mind, could possibly endure more.

How is this to be explained? Much is attributable to the want of system on the part of the inefficient, more to the want of the proper spirit. Nervous irritability is the greatest weakness of American character. It is the sharp grit which aggravates friction and cuts out the bearings of the entire human machine.

a chronic state of annoyance. The least untoward thing sets them in a state of ferment. Impatience is the poison that heats the blood and ruins stomachs, more than excess of pepper and mustard. Every machinist knows that when a journal begins to cut, there is no help but to stop and cool it off, if ruin is to be avoided.

The machinist, when he finds his machinery squeaking, applies the oil; if the bearings have become so hot as to endanger the works, he stops and allows them to cool. The human machine should be treated in like manner. It should be kept well oiled and cool.

What is the oil that will stop the squeaking—the lubricator that will keep the machinery from heating? Dickens has given us the formula in the words of his inimitable Mark Tapley: "Keep jolly." Good humor is what will keep digestion perfect and the brain from softening, while it will, at the same time, keep the heart from hardening.

"Morbid, all bile and verjuice and nerves; Where other people would make preserves, He turns his fruit into pickles."

He will outlive two such, and do the work of four. His sleep will always be blest with the "Golden dreams that make men awake hungry."

SOMETHING WORTH CONSIDERATION.

The recent unparalleled feat of pedestrianism accomplished by Weston, coupled with the fact that he attributes his previous failures to the circumstances under which the unsuccessful attempts were made, opens a question of much interest and practical importance.

Physiologists will at once refer this phenomenon to the category of reflex nervous influences, the effects of which are so familiar, in the well known occurrences of giddiness, seasickness, etc.; but the fact that the effect in this case has not been determined by sensation merely, but by a general result, is enough to prompt inquiry, whether like effects may not be a matter of every day occurrence, in many departments of labor.

ACCURATE OBSERVATION.

We often receive communications from correspondents informing us of the occurrence of remarkable phenomena, which are of little value, because the observations were neither accurate or intelligent. The fact that an aerolite has fallen here, or that a house has been struck by lightning there, when nothing but the bald fact is stated, is worth nothing.

People at large seem not to appreciate the value of observation directed to a fixed purpose. If the time an aerolite is absolutely visible is correctly ascertained, that fact is of value; so is the direction of its motion. The quarter from which a hurricane proceeds in any given locality is a valuable piece of information.

Mere looking on, without a thought of anything but wonder at a phenomenon, is not, and never will be of any profit. The expeditions which were sent at so great an expense to India to observe the recent solar eclipse, went for a purpose. Each individual knew beforehand what he was to look for and either its presence or absence, would, if observed, have been a valuable datum for astronomical science.

There are, however, a great many things in nature that can be observed at leisure, and from which much valuable instruction can be derived. Ruskin, the celebrated art author, and professor in the Workingmen's College, in London, has said that the greatest difficulty in teaching pupils to draw, is to learn them to see things rightly.

SOME SUGGESTIONS ON WORKINGMEN'S COMBINATIONS.

We have always deprecated the arraying of class against class, the combination of employes against employers, and vice versa, simply because the lessons of history, experience, and observation, show that the result is not beneficial to either. In standing aloof from these organizations, and refusing to encourage them, we may have incurred the displeasure of those who believe more in the strong right arm than in the power of the claims of simple justice properly presented.

Still, we believe that associations of workingmen may be made advantageous to them, and beneficial to society. Not, however, in assuming powers, and putting forth claims which are equally inoperative and unfounded in right, but in advancing the arts by contributions to the great sea of knowledge whose tides are always in motion.

Yet it is unpleasant to know that our working thinkers, our mechanics, should be content, as they usually are, with their own acquirements, and be so slow to impart the knowledge they possess. The columns of the SCIENTIFIC AMERICAN are always open to the statements of new processes of work, new discoveries, and useful suggestions, and it contains much valuable matter, each week, sent by practical men; but there can be no reasonable doubt but that much that would be beneficial to the workers of the country is withheld, not because of a selfish desire to reap all the benefits of an improvement, but simply because of the want of energy and thoughtfulness of our mechanics.

Such a course, especially if the efforts of the workingmen were concentrated by associations, would, in time, make the workers the power, as they are the majority, in the country. By the mutual improvement gained by this mutual instruction they would assert their power by their individual merit, and gain by the sheer force of the value of their attainments and services, the compensation, recognition, and position they now seek, vainly, we think, in combinations calculated if not intended to overawe by numbers where the victory should be gained by actual merit.

The advanced class of workers, civil engineers, etc., seem to be wiser in this respect. The London Institution of Engineers numbers more than a thousand members, all workers; and the value of this society is seen in the beauty and utility of their works all over the world, combining the very latest improvements in the employment of material with the greatest degree of elegance in design, and the shrewdest conception in avoiding and overcoming obstacles.

There is no reason why this system of mutual information should not extend to our ordinary mechanics. Such a society, national, even universal in its scope, may have hundreds of branches, and by the education of its members render unnecessary the bolstering up of inefficient workmen, by assisting them to become worthy of the places they are ambitious to occupy.