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OBSTACLES IN THE WAY OF THE SUCCESS OF INVENTORS.

The difficulties which want of means and influence places in the way of inventors, the compulsory exactions of poverty and the discouragements of those who should stand ready to aid with their influence any attempt to relieve the onus of labor and increase the return of capital employed, seem to be enough to dishearten those who hope by their improvements to benefit themselves while adding greatly to the advantage of their fellows.

Possessors of capital, whether it is invested in mechanical enterprises or not, view with more than a critical eye any device which proposes to aid them in the increase of their capital or its advantageous investment. To them the inventor appears as a harmless visionary, annoying and verbose, impractical and troublesome, well got rid of by a few words of milk-and-water encouragement, or perhaps by a bluff notice that their time is too valuable to waste on him.

Singularly enough it is that those whose experience has driven them through a similar course, and who by a lucky stroke have achieved pecuniary independence are among the last to recognize the value of an invention or the claims of the inventor. And those whose fame, if not fortune, has been attained by their persistence seem ashamed to make their virtue of perseverance glorious by encouraging followers in the same path.

But these are not the worst obstacles in the way of the inventor. His patent secured, the favorable opinion of experts and influential persons obtained, and even a fair trial having proved the superiority of his device over others used for a similar purpose, he must meet the unreasonable objections of unreasoning or captious men.

Introducing his device and procuring the assent of the party to whom he wishes to dispose of a machine, or right, he is not certain that he has made a success, even in a single instance. Although no direct objection can be urged against the facts adduced or the demonstration shown by experiment, not unfrequently the purchaser and user will bring forward some objection not really tenable, and without logical argument to support it, but which, to him, is all-sufficient.

This conservatism—vulgarly called old-fogyism—among mechanics, is the hardest difficulty met by the inventor and introducer of new tools, appliances, and methods. Is there not too much of it; too much of a disposition to give the cold shoulder to all projected, or even perfected improvements; too much of the old time sneer of "visionary" directed to the inventor, too much of an adherence to the old and not enough attention to the new, by our mechanics and manufacturers?

DOES AMERICAN INDUSTRY NEED PROTECTION?

The man who undertakes to answer the question which stands as the caption of this article, must be one of broad views. A mere superficial observer must necessarily err in his conclusions upon a subject, which has puzzled the minds of careful and thorough thinkers. It is not our intention to definitely answer this question here, but to call attention to a point, which, in all that we see written or hear spoken upon the subject, seems to be in a measure overlooked.

Commissioner Wells has told us in his able report, that a tariff is a tax.—Admitted. He also asserts that a tariff on imports is a tax that, under all circumstances, is paid wholly or in part by the consumer. Granted also

The general argument against protection based upon this well understood and admitted fact, is that the imposition of protective duties on special articles of manufacture raises the price of these articles to the entire mass of consumers, while a few are enriched by their production. The general answer to this argument which is as old as the idea of protection itself, is, that the advantages which accrue to the commonwealth from the protection of special industries, by the wise imposition of duties, compensate for the increased price of the taxed products.

It is unwise to be dependent upon foreign sources for any important production. The history of the world teaches us that the relations between nations are liable to frequent and serious disturbance, and that the increase of values upon articles of import consequent upon war is often enough to make the domestic manufacture of such commodities remunerative for a decade, if distributed equally during such a period.

But especially is it dangerous to fail in the protection of such industries as furnish material for national defence. All governments have recognized this fact, and have either taken full control of them or have made it certain that the cutting off of a foreign source of supply would not prove a source of embarrassment. The same principle can and ought to be applied to such productions as are essential to the comfort of the people at large.

There is another reason why national prosperity is dependent, among other things upon diversified occupations. It is by this means only that the full mental power of the population can be developed. All are not adapted to pursue the same calling, and different pursuits are as necessary to the health of a nation as different articles of diet to bodily health.

CENTRAL LAKE NAVIGATION.

The grand chain of lakes occupying the center of the North American Continent together affords navigation almost oceanic in its proportions. The improvement and development of these great waters have, with the increased settlement of the fruitful regions surrounding them, become a matter of necessity, and the public will be interested to know something of what is now being done in this direction.

General T. J. Cram, of the United States Corps of Engineers,

is now directing the improvement of what is known as St. Clair Flats. The improvement consists in the construction of a canal, one and one-half miles in length and three hundred feet wide, and of sufficient depth to permit the passage of vessels drawing thirteen feet at low water, and is built with a view of increasing its depth to eighteen feet in future if required. The bank is flanked by dykes of timber to be filled by the excavated earth. The timbers are to be saturated with creosote to retard decay.

The breakwater is to be a very extensive structure. It is to be built in sections three hundred feet in length, to be sunk to the water line; and it is contemplated to build thereon an immense storehouse covering the entire length, if experiments shall demonstrate the safety of such a structure. The entire area the storehouse will cover, from which also the size of the breakwater can be estimated, is one hundred and fifty-six thousand feet.

The canals are to be divided by cribwork consisting of two rows of piles driven as closely together as they can be set, and capped longitudinally with timbers. The space between is to be filled with stone, and planked. The docks are to connect with every railroad in the city by special tracks and switches, so that goods can be transferred directly from the cars to the vessels. The expense of the work is estimated at two million dollars, and when completed will be as complete and convenient as any system of inland dockage in the world.

IS LABOR-SAVING MACHINERY THE ENEMY OF LABOR?

The old, old fight, almost interminable, and persisted in notwithstanding the recorded verdict of history—and the events now transpiring, shortly to become a portion of history—is still going on. It is between ignorance and enterprise, dull conservatism and wide awake improvement. Will this absurd conflict never be ended? Will our would-be social theorists ever be willing to accept facts as better than their theories? Will ever the Malthus philosophy cease to affect social relations and the opinions of those philosophers whose thoughts intend to "shake mankind" and mold the ideas of the active ones who strive to make these thoughts a reality?

Such would seem to be the idea of some theorists. A gentleman of culture—æsthetic and literary—called upon us a few days ago to make inquiries relative to the subject of supply and demand as concerning the progress of the race. He seemed to be devoted to the idea that the supply of labor exceeded the demand, and that labor-saving contrivances were only laborer-slaying devices.

That some of the centers of manufacture and commerce are overcrowded proves nothing in favor of the idea that the laborers are too many. It proves only that this labor is misdirected, either by its possessors or others. Commerce, or rather the mercantile branch of business has grown to be a fungus on our industries. It was once used and is now calculated to be a support and aid to productive industry, but that it has proved to be either a parasite or a fungus, garroting the growth and sapping the life of industry, alluring by its temporary or periodical luxuriance, does not prove that labor is less in demand, only that other means of living than that of direct labor make seemingly fairer offers.

Do the improvements made by researches in science or experiments in art add to the difficulties of labor in seeking its reward? We cannot see it. On the contrary, every advance,