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PROGRESS OF PETROLEUM.

The efforts of the great majority of the Western Pennsylvania petroleum producers to obtain relief from what they deem the oppressive acts of the Standard Oil Company and the unjust discriminations of the United Pipe Lines, and the various railroads traversing the oil regions, have attracted more than usual attention to the present condition of this industry and its possible future.

We would here explain that the Standard Oil Company originated in Cleveland, Ohio, about twelve years ago, and was incorporated under the laws of Ohio, with a nominal capital now, we are informed, of $3,000,000, which, however, very inadequately represents the financial strength of its members. It is now a combination of the most prominent refiners in the country, and has before been credited with manipulating the transportation lines to its own special advantage.

We can recall no instance of such serious hostility between parties whose interests are at the same time of such magnitude and so nearly identical; nor can we see what substantial, enduring benefit would accrue to the producers in the event of their victory in the struggle.

They charge that the Standard Oil Company has become the controlling power to fix prices and to determine the avenues by which the oil shall be transported eastward for home consumption and for foreign exportation; that the railway companies have given this company lower rates than other parties for transporting the oil; and that through the rates given to it by the railways the value of their property is destroyed.

The reply, in effect, is, Granting all this to be true, what does it amount to? Neither more nor less than that the managers of the Standard Oil Company, by combination of capital, by intelligence and shrewdness in the management of their operations, have built up a successful business, and that they have so extended it by the use of all practicable appliances, and by the purchase of the property of competitors, that they do practically control the prices of oil, both crude and refined, and that the uncombined capital of the other oil producers, lacking the power, the intelligence, and the business skill which combined capital can secure, cannot compete with the Standard Oil Company. Now, is there any great wrong or injustice in this?

When brains can command capital it is always more successful in business matters than any amount of brains without capital or capital without brains. This result is the natural working out of the same principle that is everywhere to be seen—some men are successful and others are not.

It is the essence of communism to drag down those who succeed to the level of the unsuccessful.

If men cannot compete with others in any business they must accept the fact, and try some other employment.

If, through superior intelligence and capital, the Standard Oil Company can control the oil business of Pennsylvania, then, according to the principles of common sense, it must be permitted to do so.

What right, then, has the oil producer to complain? Why, if all that is alleged is true, will they persist in sinking more wells, when, as they say, they are controlled by the Standard Oil Company? No one forces them to lose money by continuing in the business. Let them find other employment. They do not show that the Standard Oil Company does anything that combined capital on their part and equal business ability could not effect.

The cry of monoply in this case is altogether unfounded, those opposed to the Standard Oil Company having just as much right to do all that that company does, and, therefore, there can be no monoply, because they have no exclusive powers.

As to the railway companies, they can afford and have a right to transport the tonnage offered them by the Standard Oil Company at less cost, because it costs them less to do a regular and large business than an irregular and smaller one. They would simply be acting in accordance with business principles the orld wover.

These are the arguments, the statement of the position of a successful combination confident in its resources and of victory in the coming struggle. The justness, the correctness of the doctrines enunciated, and the wisdom of so doing at this crisis, we do not propose to criticise; but it is very safe to say that if the prosperity of the complainants depends upon relief in this direction they may as well cease producing.

There are too many of them for harmonious and concerted action against the powerful corporations they complain of; and if they should succeed in securing equal transportation facilities the prices would still be regulated by the monopolists, who carry more than four-fifths of the accumulated stock of the oil regions.

The proposed appeal to Congress to pass some law whereby each producer can compel railroad companies to carry his produce at regular rates, amounts to a confession of the desperate straits of the producers and of their weakness as well; and even if successful, which is most improbable, would not remedy the deplorable existing state of things.

Still lower rates would fail to give relief, with all the present avenues of trade filled to repletion and with an increasing output at the wells. Relief and permanent relief can be found only in the direction we have before indicated: in the general application of petroleum and its products to the manufacture of gas for illuminating and heating purposes, and its substitution for coal in the metallurgic and other prominent industries of the world.

THE LIMIT OF WORK.

In distributing the prizes to workmen at the Paris Exhibition, Louis Blanc, the leader of the French Republican Socialist party, quoted approvingly these words of Simonde de Sismondi:

"If the workman were his own master, when he had done in two hours with the aid of machinery what would have taken him twelve hours to do without it, he would stop at the end of the two."

M. Blanc had been discussing very eloquently, but also very fallaciously, the relations of machinery to labor. If men were properly united in the bonds of association, he said, if the solidarity of interests were realized, "the happy result of the application of mechanical power to industry would be equal production, with less of effort, for all. The discovery of an economic method would never have the lamentable consequence of robbing men of the work by which they live. Unfortunately, we are far from this ideal. Under the empire of that universal antagonism which is the very essence of the economic constitution of modern societies, and which too often only profits one man by ruining another, machinery has been employed to make the rule of the strong weigh more heavily on the weak. There is not a single mechanical invention which has not been a subject of anguish and a cause of distress to thousands of fathers of families from the moment it began to work."

If all this, and much else that M. Blanc alleges, were true, then the condition of all workingmen to-day should be in every way worse than that of their fathers, in anti-machinery days. But such is not the case. There never was a time when the laborer toiled less or enjoyed more than in these days of machinery; and the laborer's condition is best where the machinery is best and most used.

A hundred years ago the laborer toiled long, produced little, and enjoyed less. To-day, thanks to the victories of invention, machinery does the heaviest of the work; the workman's hours of labor are fewer than formerly; his wages are greater; and his earnings will buy vastly more, dollar for dollar, than in any previous age in the world's history.

What laborer of to-day would be satisfied with the remuneration, the food, the shelter, the clothing of the laboring classes of one hundred years ago? The wants of men, as well as their thoughts, are widened by the process of the suns. And in no section of society have the daily wants been more markedly increased, or the facilities for gratifying them either, than among those that live by labor.

"If the workman were his own master, when he had done in two hours with the aid of machinery what it would have taken him twelve hours to do without it, he would stop at the end of the two."

So says the thecretical socialist. The practical workman never has, nor, we believe, ever will, act so foolishly; certainly not until the limit of man's capacity to enjoy has been reached. When the united products of manual and mechanical effort fully satisfy the desires of all men, and leave no margin of want unfilled, then and then only will men be satisfied with the reduction of effort demanded by the socialists. Until then the larger part of every increase in production by mechanical improvements will go to swell the volume of good things for human use and enjoyment. Our machinery enables our thousands of busy workers to accomplish what millions could not have done years ago, and a very large part of the aggregate increase of product comes back to them in conveniences and luxuries surpassing those the wealthiest could enjoy were machinery not employed, or were it employed, as the socialist advocates, without increasing the aggregate of production. The laziness of the savage and the advantages of civilization are incompatible. The chief merit of machinery lies in its enabling us to multiply constantly the scope and variety of our enjoyments without a corresponding increase of toil.

IRIDESCENT GLASS.

Ornamental glassware in many styles, tinted with the glowing colors of the rainbow, is now making its appearance in the shop windows of Broadway and Fifth Avenue. This is one of those brilliant little achievements of science that delights the eye and pleases the imagination. To produce the colors, the glass, while in a heated state, is subjected to the vapor of chloride of tin. Shades of more or less depth or intensity are imparted by adding to the tin chloride a little nitrate of strontium or barium.

RAILS AND RAILWAY ACCIDENTS.—NEW YORK ACADEMY OF SCIENCES.

A meeting of the Section of Physics, New York Academy of Sciences, was held November 25, 1878. President J. S. Newberry in the chair. Numerous publications of learned societies were received and acknowledged. Professor Newberry read a letter from Professor Agassiz stating that sea lilies, which had hitherto been very rare—a single specimen bringing as much as fifty dollars—have been found in some numbers by dredging in the Gulf of Mexico. Their colors are white, pink, and yellow. Professor Newberry also exhibited specimens of garnet from California, lamellar quartz from North Carolina, sharks' teeth belonging to the eocene and miocene tertiary ages from the phosphate beds of South Carolina, and a number of shells.

Professor Thomas Egleston then addressed the Academy on the subject of "The Structure of Rails as Affecting Railway Accidents."

The destruction of rails is due to three causes. 1. De-