

THE CONCENTRATION OF CAPITAL.

Those who seek to invoke the anti-trust laws for the prevention of that concentration of capital which is so rapidly going forward, and of which every day there is some fresh evidence, lose sight of the fact that the trust proper is extinct. There are no longer any trusts in the technical or legal sense of the expression. That mode of combination was abandoned after it had been demonstrated in the famous case of the *Commonwealth v. Havemeyer et al.*, the *Sugar Trust* case, that it was too vulnerable to be satisfactory or safe. Under the trust plan the properties of those who formed the combination were placed for the purposes of the enterprise under the control of the men who had been chosen to assume the responsibilities of management. There was no definite transfer of title. It was, in the eyes of the law, a combination of individuals for the attainment of an object which the courts declared to be illegal.

After that decision had been rendered and its finality established, the movement toward concentration found another channel. It pursued its development through the medium of incorporation. The *Sugar Trust* and *Standard Oil Trust* led the way, and set the example which has since been so plentifully followed. Under the new plan a company was chartered, generally, if not always, under the latitudinarian laws of New Jersey, and that company proceeded to buy out its competitors. The trust feature which formed the weakness of the first plan was eliminated. There was now not only a surrender of control, there was a change, and an absolute change of ownership. In this way the offence of making an illegal combination was avoided. From the legal point of view there was no combination point whatever. There was merely a corporation carrying on its legitimate trade, according to the sanction of its charter. That corporation might absorb its rivals or drive them out of the field without thereby rendering itself amenable to the law, and if it succeeded in securing a monopoly so much the better for its stockholders. Still the law had no ground for complaint. The corporation was within its rights.

Such being the situation it will be seen how difficult it is, how well-nigh impossible, to restrain the movement toward the concentration of capital by legislative intervention. Nothing less than the abolition of corporations would, it seems, be equal to the purpose, and a step so extreme and revolutionary as that not many would advocate. What we are witnessing is a process of economic transformation whose ultimate development can only be conjectured, but which may result in changing the whole constitution of society.—*Philadelphia Inquirer*.

MODERN PINS.

Enamel-headed pins constitute a branch of industry special to Aix-la-Chapelle, where was first conceived the idea of adapting the "enamel" or glass head to the steel shank. A manufacturer of that city, seeking means for utilizing the needles spoiled in manufacture, conceived the idea, after visiting some Venice glass-bead factories, of fixing the bead on the end of one of the "waster" needles, so as to form a pin; but it was only after long and tedious trials that he succeeded in attaching the enamel strongly enough to the shank, and also in finding a composition of glass sufficiently tough to stand the usage to which a pin may be subjected.

The general introduction of the steel

pin was not easy, because it was found that the early examples readily became detached, owing to their high polish, while they often broke through want of sufficient pliability. During the last 30 years, however, the consumption of steel pins has greatly increased; and at a single Aix-la-Chapelle factory it has been found necessary to put up separate works to make the glass for heading pins that now turn out half a ton of "enamel" daily for this purpose.

SINKING FUND ASSURANCES.

At a meeting of the Institute of Actuaries in London, England, on March 27th, a paper was read by Mr. J. E. Faulks, the assistant-actuary of the Law Life Assurance Company, on "Some Notes on Sinking Fund Assurances." It gave rise to discussion, and was afterwards received with a vote of thanks. In replying to this vote, Mr. Faulks said that the chief point in the paper was the suggestion of a tariff. The quotation given by Mr. Hovil from Mr. Newbatt recalled to his mind another remark made by Mr. Newbatt in that room, an adaptation of an old saying, namely: That in life assurance there should be—

In essentials, liberty.
In non-essentials, unity.
In all things, charity.

His (Mr. Faulks'), contention was that sinking fund policies were "non-essentials," and that unity was the proper thing there, and not liberty. There was not much for him to say with regard to a tariff. The idea of a tariff committee appeared to frighten some of the speakers, but it seemed to him that very few meetings of the committee would be required. It was merely a question of settling rates and reconsidering them periodically. Although life insurance offices had attained their present position by competition, rather than by combination, still there was a fire offices committee and a fire tariff, and no one would contend that fire insurance was less successful than life.

With regard to what the president said said as to the decreasing rate of interest, there was a good deal in the objection to the word "logical." No doubt, strictly speaking, it was necessary to do two things—(1) not to take such long breakers as ten years before allowing for a decrease in the rate of interest, and (2) to reconsider the rate of interest very frequently. Mr. Warner had mentioned the second point. With regard to the other, it had originally been his intention to put in a table based on a rate of interest, decreasing by 1s. per cent. per annum. He reminded the members that Mr. R. P. Hardy had made use of a similar idea for a particular purpose in connection with life assurance in a recent note published in the *Journal*. It afterwards seemed to him, however, that that would have been attempting an accuracy which could not in reality be attained and therefore it was better to obtain such accuracy as was possible by taking periods of ten or twenty years.

—According to the late advices from Juneau, says the *Columbian* of New Westminster, the new stamp mills being erected by the Treadwell Mining Company, on Douglas Island, have commenced grinding away at the low-grade ore that yields many hundreds of thousands of dollars every year. The number of stamps added is 750, and the output of the mine will be materially increased. The Al-ki and City of Topeka have been carrying the machinery north for the last three months. The new mills will mean the employment of a great many more men.

A NUISANCE ABATED.

It cannot but be joyful news to those who do much travelling on railways in the States—may we not add Canada?—to know that on one road at least the nuisance of the perpetual, noisy, slangy, newsboy is being abated. The *Railway and Engineering Review* says that the Baltimore & Ohio road has taken up the matter of news agents on its trains, with the result that an effort is to be made to prevent passengers from being unnecessarily bothered by the sellers of newspapers, etc. Under the new arrangement the agents can call their goods only four times within an hour in the regular day coaches. They cannot call them at all in the sleeping, parlor, chair or dining cars, as it is well understood that an occupant of any of these cars can always get what he wants through the porter, whose duty it is to look after the wants of passengers.

THE RECOVERY OF IRON FROM OVERSTRAIN.

The above is the title of an abstract in *The Mechanical Engineer*, London, of a paper upon the interesting action of iron, under certain conditions, that has been subjected to overstrain. The *Railway Review* extracts from this article, as follows:

It has long been known that iron which has been overstrained in tension—that is to say, strained beyond the yield-point so that it suffers a permanent stretch—possesses very different elastic properties from the same iron in its primitive condition. The material is said to be "hardened" by stretching, since the ultimate effect of such treatment is to raise the elastic limit and reduce the ductility of the material. More recent attention has been called to the fact that, primarily, the result of tensile overstrain is to make iron assume a semi-plastic state; so that the elastic limit, instead of being raised by stretching, is first of all lowered, it may be, to zero. This plasticity may be shown by applying a comparatively small load to a bar of iron or steel, which has just been overstrained by the application and removal of a large stretching load. When the small load is put on, the bar will be found to elongate further than it would had the material been in its primitive state; and a slight continued elongation—a "creeping"—may occur after the small load had been applied. If this load be withdrawn a quite appreciable permanent, or semi-permanent set will be found to have been produced; a set which diminishes slightly, and, if small, may vanish, provided time be allowed for backward creeping to take effect. It may also be shown that if the reapplied load be increased the elongation produced will increase in a greater proportion.

It is the recovery from this semi-plastic state induced by overstrain to a condition of perfect or nearly perfect elasticity, with raised elastic limit, that is referred to in the title of the paper. Such recovery is known to be effected by mere lapse of time, and the object of the experiments summarized, is to show the effect of moderate temperature and of mechanical vibration on this slow return to the elastic state; and further to illustrate this recovery by means of compression tests.

The straining and testing were done by means of a 50-ton testing machine, the specimens employed for the most part being taken from steel rods 1 in. in diameter, of a quality which may be described as semi-mild. Recovery is shown to be at first comparatively rapid; but latterly very slow progress is made, and weeks or months may be required before an approximately perfect restoration of elasticity is effected.