

THE TRANS-SIBERIAN RAILWAY.

From The International Magazine.

From St. Petersburg to Vladivostok the tracks extend for 9,000 versts, more than 6,000 miles, and about eleven times the distance from Paris to Marseilles.

The French traveller, as he passes through our provinces on his way from Paris to the Mediterranean, cannot subdue a feeling of pride at the greatness of his country. What then must be the sentiments of the Russians when their locomotives carry them from St. Petersburg to Vladivostok, a stretch of almost 7,000 miles?

The Trans-Pacific, from New York to San Francisco, M. Levat tells us, is not so long by one-half; the Trans-Caspian, precursor of the Trans-Siberian, the difficulty as well as the rapidity of construction of which excited our admiration a few years ago, is only 850 miles long. It seemed then if it would be difficult indeed to exceed such a record for work, as tracks 6,000 miles long, crossing two continents at a stretch, are not numerous on our planet.

The real head of the line is at Tcheliabinsk, the first large Siberian city one reaches after leaving Moscow, the trip between the two cities taking eighty hours. The rails are actually laid as far as Nijnisudinsk, just beyond Krasnojarsk, in Central Siberia, which is half the entire distance. The journey to Tcheliabinsk, the actual terminal point, consumes from 200 to 250 hours.

There has not been as yet much traffic along this road, but Western Siberia has had regular train service for a long time. There are trains running east and west three times a week, and stations have been erected all along the line, which are tending very rapidly to promote commercial life.

The trains are well arranged, with baggage cars and lavatories for all classes. The coaches, which are distinctly American in plan, with a central aisle running the entire length, are very comfortable, even those of the third class. The sleeping cars have single berths, one for each passenger. Before the end of this century, or at the latest the first of the next, we may be able in this way to travel luxuriously, without a break, from Paris to Vladivostok, the great Siberian port of the Japanese Sea.

INSURANCE AGAINST DISPOSSESSION.

It is an old story that the English are very prolific in the invention of insurance schemes, and the latest idea is one for insurance against eviction. This is reported from the north of England, where about six months since there was formed what is known as the "Newcastle and District Workingmen's Tenants' Protection Association," the object of which is to insure its members "against the visit of the bailiff" in unprosperous times. Members of the association contribute two or three pence per week according to the amount of rent they pay, for twenty-six weeks, "and this sum guarantees them their rent should they fall out of employment through sickness or some other cause for which they are not responsible (How long this payment for twenty-six weeks protects them, is not stated.) There are no expenses, all the officials volunteering their services. It is said this association has already some five hundred members, and that landlords are inclined to grant better terms to tenants who are thus insured.

THE TWO CLEAN CITIES.

From The Review of Reviews.

The two cleanest cities on the continent today are Toronto and New York, and they are both cleaned by direct labor.

New York not only employs and thus directs all its street cleaning and garbage dispatch forces, but it has an organized department with an adequate and properly adjusted equipment of horses, carts, brooms, stables, and stations, and it pays its men \$2 a day and upward for eight hours' work. To be sure, it has had a Col. Waring, but had Col. Waring been a contractor or a contractor's superintendent, the metropolis would not have been the clean city it is to day. It is by the method of direct labor, under model conditions of employment, that this first worthy result of the kind in a large American city has been achieved.

Toronto, the other of these two exemplary

cities, has gone even further than New York in eliminating the contractor. In this enterprising Canadian town, with its 190,000 people, Street Commissioner Jones has, during the last seven years, entirely revolutionized the care of the streets of the city. He has not only organized the execution of this work under a distinct department, but out of the margin thus saved from the annual appropriations for caring for the streets he has actually built and equipped a modest but complete set of workshops, where the entire construction and repair work of the department is executed.

Not only are the sprinklers, rotary sweepers, automatic loading carts, and snow scrapers, each after a special pattern devised by the commissioner or under his direction, built in these shops, but even the harnesses are made there, the horses are shod there, and it is the truthful boast of the commissioner that every article of manufacture used by the department is produced from the raw material in these shops. It is exceedingly refreshing to find there inventive genius constantly brought to bear to produce appliances, not for sale in the general market, and hence of that crude adjustment which can be used anywhere, but appliances precisely adapted to the particular needs of Toronto, with its own climate, soil, street mileage, and pavements.

THE TIN PLATE STATUS.

From Tin and Terne.

There are now 183 completed black plate mills in the United States, distributed among 39 plants. In six of these plants there are being added a total of 10 mills, making a total of mills built and building of 193. Not all of these are in operation, and some of them, situated in plants poorly located, or where other lines are given more attention, are not likely to be. There are, however, about 175 black plate mills which can be counted upon as regular producers under ordinary circumstances. With a sufficiently steady demand all the year round, these mills could readily produce 5,000,000 boxes of tin and terne plate a year. Running slack during the winter months, as many of them are now forced to do, the production cannot reach over 4,000,000 boxes. Our directory shows only 28 dipping plants in operation or running order, as against about 35 a year ago. This decrease has been made up by more active operations in the tin houses of the manufacturers of black plates, and by the addition of tin houses to some mills who were formerly sellers of black plates only.

SALESMEN.

From The Lawyer and Credit Man.

Salesmen who come immediately under the eye of the managing man, such as house men or floor men, as they are sometimes called, receive by the very fact of this personal supervision a training which the outside man very seldom gets. As the result, some of the best travelling men who are now employed have come out of the ranks of the house salesmen. It is very generally admitted, however, that special talent is required upon the part of the travelling salesman, and therefore this inside training wherever it is available, does not fully meet the requirements. Many a man who is a good house salesman is entirely unfitted for the peculiar responsibilities that grow out of travel.

Those salesmen who achieve conspicuous success, either as travellers or as house salesmen, as things are managed at the present time, are usually men of striking originality, with an inborn talent for commercial work. Nevertheless, it is true of salesmen as it is true of soldiers, or men of any class whatsoever, that native talent may always be improved by drill and discipline. These successful men would be rendered still better by the help of a special training, while their fellows of only ordinary natural endowment would have been vastly improved.

A special qualification of a salesman over and beyond the mere ability to sell goods, and the skill required to handle customers without offence, and the talent requisite to transmit orders to the office correctly, is the ability to represent the house in the way that the house wants to be represented, and in a manner that shall render the statements made by several representatives consistent with each other. Instances of inconsistency can be found without much searching. It is seldom that one talks with two salesmen of any establishment with-

out hearing statements, usually of immaterial facts, that are almost diametrically opposed to each other, or else different colorings are put upon the same basis of facts. A concern should be consistent with itself, and all its salesmen, like all its advertisements, should tell the story in the same general way.

THE STUDY OF INSURANCE.

From The Review of Reviews.

Among the life insurance companies it is to be noted that there have been no great and disastrous failures in recent years. This is in spite of the fact that the insurance business in the United States has had a development such as has been witnessed in no other country in the world. The life insurance policies now in force in this country represent over thirteen billion dollars, a sum greater than that in all the other nations of the earth combined. The 463 companies have an aggregate of over 12,000,000 policy-holders, and their total assets amount to over \$1,200,000,000, a sum approximating the national debt. Many of these policies are as much for savings as for life insurance, and the extraordinary expansion of this combined insurance and savings business has led to the suggestion that their character and methods ought to be better understood than they are at present. As it is now, educational work in this field is entirely in the hands of the insurance agents, and naturally as the agents are interested parties, their representations are viewed with some suspicion. Were the study of insurance included in the curriculum of the high schools and colleges, a vast amount of ignorance regarding the plans, objects and results of the insurance companies, that now unquestionably exists, would be dispelled. It would, moreover, help toward the inculcation of sound knowledge that would be a protection both to the public and the companies which do not do anything like a wild cat business. It has been suggested that the expense of this educational work could rightly be borne by a direct tax upon the insurance companies themselves, since it would unquestionably be of great benefit to them. And so long as our insurance institutions maintain their present high standards and their present stability, and provide so admirably for the safe and profitable keeping of small earnings such instruction could hardly fail to be of equal benefit to the public at large.

ANCIENT HARDWARE.

The Hardware Dealers' Magazine.

From the statements made by Prof. Goodman, the archæologist, the stocks of mechanics' tools, and even of some house-furnishing goods, carried by the hardware dealers of ancient Pompeii and Herculaneum, if such stores existed, did not differ so widely from those of to-day. On looking at the iron tools grouped together in an old factory there, Prof. Goodman says he could almost imagine he was gazing into a modern tool shop, except for the fact that there was a coating of rust on the iron. Sickles, hooks, rakes, axes, spades, blacksmith's tongs, hammers, soldering irons, planes, shovels, etc., are much like those used to day. Incredible as it may appear, the Pompeians had wire ropes of perfect construction. Their bronzes reveal great skill and artistic talent. The bronze brazier and kitchen had boilers at the side, and taps for running off the hot water. Ewers and urns have been discovered with interior tubes and furnaces similar to the arrangement now in vogue in steam boilers. Metal safes had substantial locks. Many of the locks and keys are most ingenious, and some very complex.

AMPHIBIOUS MAN.

From The Spectator.

Man becomes almost amphibious in certain regions. Temperature permitting, he swims as well, dives better, than many animals—better, for instance, than any dogs. The Greek sponge fishers and the Arabic divers must have sight almost as keen below water as that of the sea otter. They have even learned, by practice, to control the consumption of the air supply in their lungs. The usual time for a hippopotamus to remain below water is five minutes. The pearl fisher can remain below two and a half minutes. In a tank a diver has remained under water for four minutes. But temperature marks the limits of man's amphibious habits.