

men. The tobacco habit and its avoidance are separate roads. The latter is in the domain of health and preservation from evil; the former leads the tobacco user to slavery, bodily suffering, and fatal disaster. The character of its destination is imprinted upon the road at every stage, by nature's laws, as manifested in the ill effects upon man's physical being. Whatever may be the value of the weed for sick cattle, or to destroy insects, or for other uses, science and nature alike re-echo the divine law that, taken into his system in any form, "tobacco is not good for man."

PASSING OF THE HORSE.

According to breeders generally, the "bike" and the trolley car have just about completed the destruction of the industry of raising horses for power. Sales have fallen off beyond all previous reports, the demand is at a minimum, and prices are so low as to be deemed simply vulgar. Of course a few rich people still drive teams and carriages, and farmers and freighters in interior and thinly settled sections still use horses for field and road work. But the great market for serviceable animals which was created by the needs of street car companies is utterly ruined, the livery-stable proprietors have already more stock than earn the pay for bay and grain consumed, and the great middle class finds in the noblest of quadrupeds no profit or pleasure which the silent wheel of steel or the mighty electric car cannot supply.

Elderly readers will no doubt remember that with the introduction of railroads thirty, forty or fifty years ago, a great dread was entertained as to the extinguishment and future uselessness of the equine. Truly his field or profitable operation appeared to be materially narrowed by the advent of his so-called iron-brother. Yet he was not driven entirely out of business; on the contrary, new paths of employment were opened, and since that time his patience, strength and speed have made him more than ever the companion and benefactor of man. So, what the future may have in store for him must not be regarded as an altogether hopeless matter; and if everything else fails, his appearance on the table seems promising enough. The prejudice against horse meat is rapidly disappearing in America as it has already entirely disappeared in France and Germany, and is fast going in England. On the score of cleanliness and nutritiousness, the flesh of a well-fed horse is said to be far superior to many other things that mankind eats, while the price is strongly in its favor as compared with other meat products. The extensive raising of horses for the shambles may become within the next few years one of the greatest of American industries.

ONE IMPENDING DANGER.

If conclusions may be formed from present appearances the repeated forecasts of strong competition in the near future on the industrial field between

Asiatic manufacturers and those of the western world are not to be regarded as mere dreams of alarmists. It seems probable that as civilization finds its way to the millions of Japan and China, and these learn the value of adopting modern methods, they will do so, and they are in a position to place on the market almost anything in demand at a figure that would be ruinous in any country where labor is unobtainable except at comparatively high wages.

A little over thirty years ago Japan erected its first cotton mill with 5,466 spindles. Now that country has forty-six mills with 600,000 spindles and large orders have recently been placed for more cotton spinning machinery, evidently in anticipation of an enlarged market in the Chinese districts opened to the outside world by the recently concluded treaty of peace. The Chinese themselves also are making preparations to supply the home demand in this line. According to a report of the United States consul at Tien Tsin, one Chinese official has ordered from Europe cotton mill machinery to the amount of \$1,000,000. Some idea may be formed from these figures of the industrial awakening now taking place in those countries and of the effects it may have in the future on the established industrial centers of the world, when other fields of labor shall have been entered on a similar scale. The orientals are also rapidly exerting their energies in many directions. They are now not only making their own cotton fabrics but also pottery, leather goods, iron and steel ware, and watches, and they are looking for a large export trade in such merchandise. In view of these facts it is evident that a disturbance of the industrial equilibrium of the world is threatened and that questions of the gravest nature will have to be met in the near future.

ALL BY 'PHONE.

What may be expected in a not distant future as a result of electrical appliances can be inferred from the fact that telephone service on an extended scale is now utilized in Birmingham, England, for the purpose of distributing religious sermons in various parts of the city, and that a proposition has been considered to connect in a similar manner the main auditorium of a Philadelphia church with the room below, so as to enable two congregations to hear the exercises in the upper room simultaneously.

Christ church, in Birmingham, is connected by means of loud-speaking telephones with the principal hospitals and the jail, not only in Birmingham but in seven large cities, at a distance varying from one hundred to two hundred and fifty miles, says the *San Francisco Chronicle*. The telephones are attached to the reading desk, to the pulpit of the preacher and to the place reserved for the organ and choir. By this contrivance the whole of the service may be heard by thousands not present.

The possibilities suggested by this arrangement are innumerable. It would, for instance, enable a number of small churches to club together and support one popular minister who might preach

to them all in a central telephone church, thus rendering the services of a number of ministers, who might do better in other callings, superfluous. And in the same way, the musical exercises of one congregation might be utilized in several places simultaneously. Central choirs would be formed of the best talent obtainable, and their harmonious melodies would be heard over the whole circuit for hundreds of miles. It may as yet sound irrational to say that vast audiences were assembled in Ogden, in Provo, in Logan, in Manti, in St. George, etc., to listen to the musical entertainment given by the world-renowned Salt Lake choir in the Tabernacle, on such and such an evening, and that the various numbers on the program were enthusiastically applauded all over the Territory, yet that is evidently within the possibilities of the future.

In the same way, when electricity shall have been identified with the interests of politics on a larger scale than hitherto, people will no longer depend on abbreviated reports of campaign speeches or debates in legislative assemblies. The wisdom, patriotism and eloquence of politicians will be had on tap, as it were.

The idea of utilizing the telephone for such purposes has often been discussed and imaginative writers have dwelt upon it as a materialized fact in the commonwealth of the next centuries, but to the Birmingham preacher probably is credit due for having taken the initiatory practical step in this direction. The won'ters to come by the aid of electricity are no doubt numerous; still, if signs are not deceiving, much greater wonders are in store for another generation. If John W. Keely's theory of the "law of sympathetic vibration" be correct, it will some time be possible to utilize for social and commercial purposes the forces that bind the universe together. Beyond that even imagination at present refuses to go.

STEAM AND ELECTRIC RAILWAYS.

There has been much discussion of the future relations between steam and electricity in railway transportation, and owing to the fact that the electric fluid has been shown capable of wonderful adaptation some people have conceived the idea that ultimately it would supersede steam as the motive power on trunk lines as well as in city and suburban railways. In harmony with this view the electric railway between Chicago and St. Louis was projected, on which it was proposed to run trains at the rate of 200 miles per hour. Notwithstanding the fact that an electric motor had never been constructed which anywhere approached a capacity for such a driving power, or that the public demand for quick transportation had not come within sight of the 200-miles-an-hour mark, some stock was sold in the road, but its construction never was attempted, and certainly will not be for many years to come, if at all. The idea was based upon a mistaken comprehension of the economic possibilities in electrical generation and trans-