The plans and local installations are from the design of Mr. Samuel L. Mason, of Edinburgh, who was also the originator of the scheme. He has closely followed the arrangements of the North Brilish Company at Burntisland, of which he had experience when formerly general manager of that company. The work has been financed and constructed by him, the resident engineer being Mr. William Gregory, C.E. Mr. Stroudley, C.E., of the London, Brighton, and South Coast Railway Locomotive Department, constructed and erected the machinery.

It is in great measure due to the enterprise of the Brighton Board, to their manager, Mr. J. P. Knight, goods manager Mr. Stainforth, and to Mr. Spencer Balfour, M. P., that the Isle of Wight is secured the possession of an economic means of communication of great promise and capability. The Brighton Company have, we are informed, entered into agreement by which they adopt the new route for the whole of their traffic, under conditions which give assurances of financial success.—

Eng.

## AMERICAN VS. SWISS WATCHES.

Several of the largest watch factories in this country have their representative agents in Chicago. The American watch industry a few years ago was in its infancy, and its rapid growth and development is one of the marvels of the day. Illinois has two or three watch manufacturing establishments, and in this city the manufacture of watch casings is an important industry. The time has gone by when an imported watch, even a Jorgenson, is considered indispensable as an accurate time-keeper. American watches are admitted to be as "faithful chroniclers of the passing time," as any watches in the world. In speaking of Swiss watches Consul-General Cramer, writing to the State Department from Berne, remarks that since 1882 the export from Switzerland to the United States of watches and materials has suffered a steady decline.

The reason therefor is not because the Swiss watches are less good now than formerly (they still maintain "a good report"), but because of the rapid development of the same branch of industry in the United States during the past eight or ten years. American watches, in beauty and quality, successfully compete with Swiss and Jorgenson watches, not only in the United States, but also in Europe, and even in Australia.

The advantage the Swiss watch manufacturer has over his American colleague is the cheapness of labor. The advantage which the latter has over the former is that he, with his perfect tools and machinery, is able to produce a larger number of watches during a given period of time than his Swiss colleges for the latter because for the latter has been been able to the latter has been always to the latter has over the former is that he, with his perfect tools and machinery, is able to produce a larger number of watches during the latter has over the former is that he, with his perfect tools and machinery, is able to produce a larger number of watches during the latter has over the former is that he, with his perfect tools and machinery, is able to produce a larger number of watches during the latter has been always to the latter has been a

league, for the latter has much of his work done by hand labor. While Consul Cramer does not wish the Swiss watch manufacturer and his employes to suffer from want of market for their articles, nevertheless, the interest every American citizen should feel for the success of the various industries of his country induces him to say that if our people would patronize to a larger extent than heretofore this particular home branch, much money would remain in the country and many more mechanics and laborers would find employment. It is not likely that American watches will find a market in Switzerland, but, with judicious enterprise and management, a market may be found for them in France, Germany, England, Austria-Hungary, Russia, the Danubian Kingdom and Principalities, and European Turkey, to say nothing of Australia and India.—Western Manufacturer.

## PROGRESS.

From 1784 to 1884 is only a century but it embraces almost all the inventions which we find so useful in daily life. Even many inventions once deemed indispensable, but now being rapidly superseded by others, were born within this century. It was only in 1784 the first mail coach was seen and yet "the Wild Irishman" and "the Flying Dutchman "express trains travelling a mile a minute, have become a household worlds the world over. The first fire balloon was sent up in 1784, and to-day monstrous developments of the idea are being used in warfare. A century ago the oil lamps, so familiar, were unknown; candles would not burn without snuffing; the wax candle even, was unknown and gas for illumination was uninvented. Since then gas is being abandoned for illumination but applied for heat and cooking purpose as fuel saving inventions. The flint and tinder were the means of obtaining a light until as late as 1827 when the matches we value so lightly were indented. Really good locks and the manifold adoptions.

of the spring, were all discovered during this century, the locks of the past being clumsy and easily disarranged contrivences. Labor saving machinery almost every branch belongs to this century; and in agricultural machinery the inventions have received their great incentive through the abundance of land and scarcity of labor upon this continent. Photography too, has placed within the means of the masses a priceless boon—the facility of preserving correct impressions of their relatives features—and strengthened the hands of justice in tracing criminals. This wondrous invention belongs to this century also. So on we might proceed with an astonishing list embracing every branch of science, and affecting every walk of life.

## FOURTH OF JULY

An Oration on Independence Day by Bill Nye.

Fellow-Citizens,—One hundred and nine years have now passed since our forefathers declared all men to be free and equal, and began to hold out inducements for the oppressed of other climes to come here and help us kill off the indiana.

other climes to come here and help us kill off the indians.

It has been a great success. It has been thoroughly demonstrated to a dying world that all men are fully equal to all other men, if not more so. We point with pride to day to our broad lands, our luxuriant national debt, and our steadily increasing Mormons. We have only a few more Indians to wipe out, and then the oppressed foreigner will have it all his own way.

The men who declared themselves free and independent 106 years ago are now no more. Yielding to the great nervous strain incident to a red hot campaign, they finally pined away and died. As forefathers we can never successfully supply their places, and their untimely death has cast a pall over this otherwise joyous occasion.

To day from ocean to ocean America rejoices. From the humid Atlantic to the moist Pacific the mighty cannon thunders forth a nation's exultation, and the smaller cannon is gathering in its harvest of thumbs. This is an annual holiday and great national thumb carnival.

We rejoice that the idea of freedom suggested itself to our forefathers. Otherwise we would all be in Canada to-day.

Now only a part of us are there.

Let us not speak lightly of Canada for some of our largest moneyed men are there. While we would not care to be a part of Canada it is a good province to smuggle into or smuggle out of. It is a good place to stroll into after banking hours, while the Board of Directors are in session.

One hundred and nine years ago the king of Great Britain made the great mistake of his life. I only regret that he did not live to see it as we see it to-day. Had he been less overbearing toward the infant colony, the yong man of America would have been drinking alkali water in Egypt to-day. We could have fought the heathen all over the globe, and left our shoulder blades to bleach in any clime which we might select.

Had the royal tyrant so tened a little toward the struggling settlements in America 109 years ago, he could have borrowed our navy to day if he would agree to take good care of the worms and return them in as good order as he found them.

But he decided to do differently and to-day he must take the bitter consequence. Kings are not always right. They frequently get left. Of all the many kings whom I have known personally, and with whom I have been thrown more or less, there are only four or five upon whose judgment I could rely during a great crisis.

That is the reason I very rarely go to a crowned head when I am in trouble.

I seek out some tender-hearted and unselfish pawnbroker; and tell him all.

There is one cloud, fellow citizens, which I see with my prophetic eye, just climbing the distance horizon of our National existence. Sooner or later it will darken the brighest day for us Is it the leprous Chinaman or the great unlaundered Mormon? I hear you ask. Is it the spoil system under which one half of the people will always be happy and the other half accursed. Is it the kiln-dried, fire-and-burglar-proof, wormless American dried apple pie which is now invading our happy homes; Is it the baleful simoom breath of New England rum, which would eat out the vitals of a stone quarry and go back the next day to inquire for the old nitro-glycerine cans.

Ah! no fellow-citizens; a thousand times nay. It is this: If our republican form of government holds together for nine-ty one years more, we would have to celebrate again, and it