AMERICAN RAILWAYS

As Related to Commercial, Industrial and Agricultural Interests.

Present Period Styled the Age of Transportation — Foreign Countries Buying Our Locomotives — Development of the West.

"One of our great writers has said of this closing period of the nineteenth century that it is an age of transportation. Transportation underlies material prosperity in every department of commerce. Without transportation commerce would be impossible. Those states and nations are rich, powerful and enlightened whose transportation facilities are best and most extended. The dying nations are those with little or no transportation facilities."

These were a part of the opening words of an address delivered before the International Commercial congress, recently held in Philadelphia, by George H. Daniels, General Passenger Agent of the New York Central & Hudson River railroad, and president of the American Association of General Passenger Agents.

He then went on to quote Mr. Mulhall, the British statistician, who in his work on "The Wealth of Nations" said of the United States in 1895: "If we take a survey of mankind in ancient or modern times, as regards the physical, mechanical and intellectual force of nations, we find nothing to compare with the United States."

Mr. Mulhall proved by his statistics that the working power of a single person in the United States was twice that of a German or Frenchman, more than three times that of an Austrian and five times that of an Italian. He said the United States was then the richest country in the world, its wealth exceeding that of Great Britain by 35 per cent., and added that in the history of the human race no nation ever before possessed 41,000,000 of instructed citizens. Should Mr. Mulhall revise his figures to-day, the differences would all be in favor of the United States, for in the past 18 months we have demonstrated the superiority of our manufactures in every direction, and our ability to cope successfully with questions which have heretofore been handled exclusively by the older nations is now recognized by all the world.

Mr. Daniels told of a letter he had received from a friend in Tokio, written only a short time ago, in which was this significant sentence: "You will be interested in knowing that I have hanging on the wall of my office a framed picture of your 'Empire State Express,' and we expect in the near future to be hauling a Japanese 'Empire Express' with an American locomotive." They have now in Japan more than 100 locomotives that were built in the United States. In Russia they have nearly 1,000 American locomotives, and practically every railway in Great Britain has ordered locomotives from this country since the beginning of the war with Spain.

But it is not alone our locomotives that have attracted the attention of foreigners who have visited our shores; our railway equipment generally has commanded admiration and is now receiving the highest compliment, namely, imitation by many sister nations.

The demand for American locomotives from all parts of the world Mr. Daniels attributed, in the first place, to the superior quality of our machinery, and, in the second, to the fact that the general passenger agents of the American railways have, through their advertising, made the marvelous results accomplished by our locomotives household words in every country on the globe.

The emperor of Germany in his speech to the Prussian diet in January last, said Mr. Daniels, did not lay the greatest stress upon the necessity for increasing the army or for the construction of additional ships for the navy, but he did impress upon his hearers the great importance of extending the railroads and the navigable canals. In order that the German nation might have knowledge of the most advanced theories and practice in the construction and operation of railways an imperial German commission was sent to the United States a short time ago for the purpose of examining American railways and making such recommendations as their investigation should suggest. In the report of this commission, which was recently published, one of the first sentences is as follows: "Lack of speed, lack of comfort, lack of cheap rates, are the charges brought against the German empire's railways, as compared with those of the United States." They recommended the adoption of many of our methods, explaining in their report that they were far superior, not only to those in vogue in Germany, but also superior to those of any other country.

One of the claims made by Mr. Daniels is that railroads supersede the canals, and he gives as one reason the general demand of the American public for quick time. A shipper having a hundred thousand barrels of flour or a million bushels of grain for export must move it from Buffalo to New York within a specified time, and he cannot risk the slow process of the canal.

What Railroads Have Accomplished.

A few examples of the achievements of American railroads in a little more than half a century, and many of them within the last 25 years, were then given. Before the railroads were built it took a week to go from New York to Buffalo, nearly three weeks from New York to Chicago; and at that time no man would have thought of making a trip from New York to the Pacific coast, except a few of the hardiest pioneers, and when on such an occasion the goodbyes were said, it was expected on both sides that it would be forever. If tomorrow night you should place a letter on the Pacific and Oriental mail train, which leaves New York at 9:15, you may be sure that your correspondent in San Francisco will be reading it next Monday night—four days from New York. The framers of our constitution would have considered a man entirely beside himself who would have suggested such a possibility.

In 1875 the states east of the Missouri river were sending food and clothing to the starving people of Kansas. Thanks to the facilities afforded by the railroads the corn crop of Kansas this year is 340,000,000 bushels.

It seems but a very few years, said the speaker, since I made my first trip to Colorado, and stopepd on my way at the home of Buffalo Bill, at North Platte, Neb., on the Union Pacific. At Ogalalla, 51 miles west of North Platte, the Sioux Indians were roaming over the prairies and making more or less trouble for the early settlers who ventured so far out of the beaten paths of civilization. The Nebraska corn crop this year covers 8,000,000 acres, and the yield is 290,000,000 bushels.

Previous to the construction of the Northern Pacific, the Great Northern, Northwestern, St. Paul, Burlington, and other railways that traverse that wonderful region known as the "wheat belt," there was nothing to be seen but prairie grass and an occasional band of untamed savages.

Development of Pacific Coast.

In 1849 there came across the continent reports of the discovery of gold in California, but the only means of reaching its Golden Gate was by sea around Cape Horn, or the long and perilous journey, with ox teams, across the plains, including what was then styled in our geographies the American desert, and through the hazardous mountain passes of the western part of the continent. The completion of the Pacific railroads changed all this, and opened new fields for all kinds of enterprises, in an unexplored territory stretching over more than 2,000 miles to the west, northwest and southwest of the Mississippi river, the products of which region were practically valueless until the means of transporting them were provided by the railroads. The wheat crop of California this year is 37,000,000 bushels. The largest crop ever produced in California was in 1880, when owing to exceptionally favorable weather conditions that state produced 63,000,000 bushels. The gold output of California for the year 1899 is estimated at $16,000,000. The vineyards and orange groves of California would be of practically little value were it not for the fact that the railroads, by their trains of refrigerator and ventilated cars, make it possible to transport the products of her fertile valleys to all sections of the country.

It seems but yesterday that the railroads were completed into Portland, Ore., Tacoma and Seattle, Wash., and it is marvelous that for the year ended June 30, 1899, there was exported from the Columbia River valley 16,000,000 bushels of wheat and from the Puget sound region 10,000,000 bushels. Oregon and Washington form the northwest corner of the territory of the United States south of the line of British Columbia and are directly on the route to our extreme northwest possession, Alaska. The wheat crop of the states of Oregon and Washington for the year 1899 is 48,600,000 bushels. There was exported during the year ended June 30, 1899, from the Columbia river direct to foreign ports 1,100,000 barrels of flour, and from Puget sound points 800,000 barrels.

Colorado, which, with its inexhaustible mines of gold, silver, lead, iron and coal, forms almost an empire in itself, will produce this year of 1899 of gold, $24,000,000; of silver, $14,200,000; of lead, $4,400,000, in addition to a magnificent crop of wheat, fruit and vegetables. Thanks to her railroad facilities, Montana is to-day the richest mineral region of its size in the world. The latest published statistics—those of 1897—give the mineral output of Montana as $54,000,000.

Without railroads, Kansas, Nebraska, Minnesota, North and South Dakota, Montana, Colorado, California, Oregon and Washington would still be the home of savages.

Service of American Railroads.

It is beyond question that American railroads to-day furnish the best service in the world, at the lowest rates of fare, at the same time paying their employes very much higher wages than are paid for similar service in any other country on the globe. In the United States the first-class passenger fares last year averaged 2.98 cents per mile, although on some large railways the average was several mills less than two cents per mile; in England the first-class fare is four cents per mile; third-class fare, for vastly inferior service, is two cents per mile, but only on certain parliamentary trains. In Prussia the fare is three cents per mile; in Austria, 3.05 cents per mile, and in France, 3.36 cents per mile.

Our passenger cars excel those of foreign countries in all that goes to make up the comfort and convenience of a journey. Our sleeping and parlor car system is vastly superior to theirs; our baggage system is infinitely better than theirs and arranged upon a much more liberal basis. American railroads carry 150 pounds of baggage free, while the German railroads carry only 55 pounds free. The lighting of our trains is superb, while the lighting of trains on most foreign lines is wretched.

Some Striking Examples.

Mr. Daniels then cites two examples of the unsurpassed passenger train facilities of American railways.

A single locomotive recently hauled a passenger train of 16 cars, nine of which were sleeping and parlor cars, from New York to Albany, a distance of 143 miles, in three hours and 15 minutes, which is 44 miles per hour, and is the regular schedule time of the train. The train weighed 1,832,000 pounds and was 1,212 feet—or nearly a quarter of a mile—long.

The Empire State express has for years been making the run from New York to Buffalo, 440 miles, in eight hours and 15 minutes, an average speed of 51 1-3 miles an hour, including four stops—two of them for changing engines—and 28 slow-downs, on account of running through incorporated towns and cities. For one stretch of 22 miles, another of 17 miles, another of 16 miles and another of 60 miles, the regular schedule time is exactly 60 miles an hour. For one stretch of 12 miles it is 63.40 miles an hour. For another stretch of nearly ten miles it is 64.86 miles an hour. The weight of this train is 608,000 pounds, and it has seating capacity for 248 passengers.

These are some of the achievements of American railways in passenger service that have not been approached in any other country on the globe, and in my opinion it is achievements of this character that have made it possible for the United States to expand its commerce with such astounding rapidity.

The fact that American passenger service attracts the attention of people of every other country who visit our shores is demonstrated by the desire of all foreigners to ride on the Empire State express—the fastest long-distance train in the world—and the further desire to examine the magnificent machines that haul our great trains.

FIRST MACHINE TOOL.

A Primitive Potter's Wheel Is Sculptured on One of the Monuments of Ancient Egypt.

There can be very little doubt that the potter's wheel, or potter's lathe, as it is also termed, represents to-day the most ancient form of machine tool known.

Among the many sculptured records of the trades and occupations which so vividly represent the customs and habits of the ancient Egyptians, the potter and his wheel have been found frequently depicted, and it is curious to note that through the almost countless generations since that time this crude type of lathe has undergone no material modification.

The primitive form was evidently a small round table, set on a pivot and free to revolve, being turned by hand at intervals; and to this device there were added in the course of time such simple conveniences as a table to support it and a foot or a hand power turning arrangement, displaced in recent years in possibly a few isolated cases, by actual engine power driving.

In general use, however, the potter's wheel of the present time bears all the characteristics of the one which 400 years or more ago served to turn out pottery attesting unsurpassable taste and skill.

It is curious, too, that in none of those ancient records are there shown examples of the forerunner of the common turning lathe as we know it today, even though the art of turning may be traced back to a very remote period. Among Egyptian antiquities that have been found at Thebes and other cities there have been many specimens which exhibited indubitable signs that the material, while in revolution, was subjected to the action of a tool held at rest—legs of stools and chairs, for example, and lamps and musical instruments—and in later centuries, among the Greeks and Romans, the lathe was undoubtedly in common use.

Unfortunately, however, none of these early writers have left any account of the lathes and tools employed by their contemporaries. — Cassier's Magazine.

Soldiers' Ingenuity.

One of the most durable and serviceable arrangements for letter envelopes has been devised by the soldiers in the Philippines, from native bamboo. A piece of this material about a foot long is carefully cut and scraped. One end is usually cut at the joint of the bamboo rod, so that the end is closed. By nature the rod is hollow, and the whole construction forms a tube. The letters are made into a roll and then shoved into the hollow bamboo. Through the open end a pin is placed, thus keeping the letters from falling out. In many instances, because gum was not available to paste paper on the tube, upon which to place the address, the soldiers cut on the bamboo the name of the person to whom the letter was consigned.—Eastern Daily Press.

BANKING STATISTICS.

Comptroller Dawes Makes Public the Results of an Investigation He Has Made Into Financial Matters.

Washington, Nov. 17.—Charles G. Dawes, comptroller of the currency, has just made public the results of an investigation which he has made into the number of loans and deposit accounts, rates of interest and resources of the combined banks of the United States in the years 1889, 1894 and 1899. In collecting this data nearly 10,000 reports from banks have been examined and compiled. The investigation into number of loans and deposit accounts and average loans and deposits is the first ever made covering the United States, either in reference to the national system or banks other than national. The results of this investigation indicate a magnitude of banking resources and a rate of growth in number of deposit accounts which is unparalleled in the financial history of the world. The general deductions from the investigation covering the last ten years is given by the comptroller as follows:

First—That the number of individual depositors in the banks of the United States is constantly increasing, as indicated by the regular increase in the number of deposit accounts of the combined banking systems, estimated as follows: July 12, 1889, 7,073 banks reporting, 6,708,971; July 18, 1894, 9,508 banks reporting, 8,99[illegible]786; June 30, 1899, 9,732 banks reporting, 11,43[illegible]611.

Second—That there is a demand from borrowers for the use of the greater portion of the deposits of the banks, and while the number of individual borrowers is increasing the depositors greatly outnumber the borrowers and the increase in the number of borrowers is much less than the increase in the number of depositors, as indicated by the rate of increase in the number of loans, estimated as follows: July 12, 1889, 7,203 banks reporting, 2,188,341; July 18, 1894, 9,508 banks reporting, 2,999,694; June 30, 1899, 9,732 banks reporting, 3,911,651.

Third—That the growth of the banking systems is being characterized by a gradually lessening rate of interest charged on loans.

Fourth—That a gradually lessening rate of interest is being paid upon deposits.

Fifth—That, considering the large clientage of national and savings banks, the average deposit of the individual or corporation is slowly increasing.

Sixth—That the average size of the loans, all classes of banks considered, has not varied much in the last decade.

Seventh—That the growth in the aggregate of individual deposits has been as follows: July 12, 1889, 7,203 banks reporting, $3,775,410,442; July 18, 1894, 9,508 banks reporting, $4,581,210,830; June 30, 1899, 9,732 banks reporting, $6,764,650,361.

Eighth—That the growth in aggregate loans has been as follows: July 12, 1889, 7,203 banks reporting, $3,475,277,372; July 18, 1894, 958 banks reporting, $4,085,[illegible]61,410; June 30, 1899, 9,732 banks reporting, $5,167,895,810.

THE JAPS DESIRE WAR.

Fretting Under Russian Aggression, the Mikado's Subjects May Designedly Seek a Motive for Trouble.

London, Nov. 17.—John Dill Ross, an expert in far eastern matters, has a statement in the Mail which expresses a firm belief in the possibility of trouble between Japan and Russia. He thinks Japan may designedly seek a motive for the struggle, and he suggests the probability of an invasion of Japan by Russia. He says:

"There is a Japanese peril which is a danger and a menace to the peace of all the great powers, America included. The relations between Russia and Japan, which seems strained to the breaking point one day, is little more reassuring on the next. There is indication of an unworkable state of things in the far east.

"The Japanese are restless under a sense of wrongs which are as intolerable to them as those of the Uitlanders in the Transvaal have been to us. They have a very powerful navy and a fine army, maintained at a cost which weighs heavily on the people who count everything in dollars and cents instead of pounds and shillings."

BANDITS IN THE EAST.

Lake Shore Train Boarded by Masked Men, Who Entered the Express Car, but Were Frightened Away.

Erie, Pa., Nov. 17.—A daring attempt was made by a gang of masked men to rob a Lake Shore train between Erie and Conneaut early this morning. The robbers boarded the train at Ashtabula, where it stopped to take water. At a lonely place called Dock junction, two miles east of Conneaut, the express messenger stepped from one car to another for the purpose of checking up some express bills, when one of the gang sprang into the car and broke into several packages. But before he could get to where the money envelopes were the messenger returned and seeing the robber at work gave the alarm. The other members of the gang, who were standing guard on the platform of the west end of the car, then pulled the bell rope and when the train stopped jumped off and made their escape in the darkness.

LOGAN'S BODY COMING HOME.

Citizens of Youngstown Making Preparations to Bury the Young Hero—Message of Condolence from Roosevelt.

Youngstown, O., Nov. 17.—A mass meeting of citizens will be called and a committee will be appointed to meet and escort the remains of the late Maj. John A. Logan from Chicago to this city. Mrs. Logan received the following message of sympathy from Gov. Roosevelt to-day:

"Please accept the deepest and most heartfelt sympathy of Mrs. Roosevelt and myself. Your husband has left to his children the priceless legacy of a hero's death."

LOOKING TO THE FAR EAST.

The Asiatic Squadron Is by Far the Largest of the United States Navy, and Will Continue to Be.

Washington, Nov. 17.—"The Asiatic squadron is now by far the largest squadron of the American navy. I doubt if we will ever again see the time when the American naval force on the Atlantic will equal that which will be maintained upon the Pacific." This was said by a high authority in the navy department. He adduced reasons for his belief, the force of which can scarcely fail to be appreciated. Since the war with Spain the interests of the United States in the Pacific have become greater than its interests in the Atlantic. There is every reason to believe that they will remain paramount. The eyes of the world are now upon the far east. It is there that the commercial triumphs of the future are to be won. All the great nations appreciate this fact, and each is straining every endeavor to put itself in such a position that it will be a large participant in the harvest.

The United States has become the master of the Pacific. In Pearl harbor in Hawaii, Pago Pago harbor in Tuluila, the harbor of Guam and Manila bay the United States possesses the four finest harbors to be found between San Francisco and China. In the maintenance of a great merchant marine and naval power the possession of fine harbors is of the greatest advantage. All nations desiring to compete with the United States on the Pacific will be seriously handicapped by the lack of good ports, naval and coaling stations.

Every natural advantage being with the United States in exercising control of the Pacific, both in a commercial and naval sense, it only remains for the government to realize upon its opportunity. The work of fitting up the harbors of Hawaii, Tuluila, Guam and Manila to meet the demands which will be made upon them has already been begun. Plans for fortifying all these harbors are now being made by the war department, and the navy department is preparing to meet the needs of the navy by erecting piers and coaling stations. Contracts have been let for the construction of steel coal sheds in Hawaii, to have a capacity of 20,000 tons, and for two steel piers. One of these piers is to be 465 feet long and 80 feet wide. The other is to be 210 feet wide at the retaining wall, 40 feet wide at the outer end, 400 feet long on one side and 360 feet on the other.

The steel pier to be erected at Pago Pago is to be 256 feet long and 48 feet wide. The coal sheds will have a capacity of 5,000 tons. The steel for these works is already on the way to Tuluila. A coaling station, with a capacity of 10,000 tons, is to be erected at a good location in the harbor of Guam. It has also been decided to make a coaling station of land which the government has leased from Japan in the harbor of Yokohama for that purpose.

THE HOLLAND BOAT.

Two Reports State That the Trials of the Submarine Torpedo Boat Have Been Successful.

New York, Nov. 17.—The official reports on the Holland submarine torpedo boat from John Lowe, captain United States navy, and the board of inspection and survey, in which the president is Admiral Frederick Rodgers, were made public yesterday. Both reports deal at length in the technicalities of the trials and both agree that the trials have been successful in almost every particular. Capt. Lowe concludes his technical report as follows:

I report my belief that the Holland is a sucful and veritable submarine torpedo boat, capable of making a veritable attack upon an enemy unseen and undetectable, and, that, therefore, she is an engine of warfare of terrible potency which the government must necessarily adopt into its service.

Her Liberty Was Brief.

Phoenix, Ariz., Nov. 17.—Pearl Hart, the alleged woman bandit who was charged with holding up a stage near Florence, was acquitted last night at the trial before Judge Dean at Florence. Miss Hart addressed the jury in her own defense and pleaded passionately for freedom, that she might return to Toledo, O., to see her fast-failing mother. Immediately after her acquittal the woman was re-arrested, charged with interfering with United States mails and will be tried again.

Tidal Wave 35 Feet High.

Vancouver, B. C., Nov. 17.—Full details are contained in Japanese papers of the Shidsouaka tidal wave which caused fearful loss of life and property. The tidal wave swept in between the banks of the river Suzukawa with almost incredible rapidity and carried off 50 houses with their inmates, numbering 78. Hundreds of other houses were submerged, many being moved some distance from their foundations. The wave attained a height of about 35 feet.

On Fire in the North Sea.

London, Nov. 17.—The Hamburg-American line steamer Patria, Capt. Frohlich, which left New York November 4 for Hamburg, is on fire in the North sea. All her passengers were taken off by the Russian steamer Ceres and landed at Dover, but Capt. Frohlich will try to reach Hamburg with his steamer. There were 24 women and 20 children, including six babes in arms, among the passengers.