

TWENTY YEARS OF STANDARD TIME

Revolution Wrought by Its Adoption by the Railroads.

William F. Allen, Instrumental in Securing the Change from Old Chaotic Conditions, Tells How It Was Effected.

There is to be no ceremonial on Wednesday of the twentieth anniversary of the adoption by the railroads of "standard time" in this country, a change from the old system, where in every locality the people had been accustomed to live their lives by the solar schedule, with the result that there was endless confusion in time tables.

William F. Allen, Secretary and Treasurer of the American Railway Association, who is credited with having secured the adoption of standard time, when seen yesterday afternoon at his office, 24 Park Place, said: "People of this generation can hardly understand the revolution delivering them from difficulties of travel and the shipment of goods effected by the adoption of standard time. Old readers of THE NEW YORK TIMES, which fought for the movement, will remember. At noon on Nov. 18, 1883, fifty different standards of time resolved themselves into four, the minute hands of clocks and watches being reset at all points to the same minute mark of the dial. Only a few of the railroads did not make the change at once, but they fell in line within a few weeks.

"Some of the cities and hamlets were slower, it being something over two years before Cincinnati adopted the standard. There they had the solar, Columbus, and Louisville times, with the result that there was a good deal of confusion, and it was easy for those who were late to insist that they were early according to the time they fancied, and for the others to insist that they were late. The question as to changing to a standard time was very bitter in certain places, and among them Charleston, where a local prophet insisted that the fooling with the reckoning of time would lead to some manifestation of divine displeasure. Three years later there was the earthquake.

"The movement by which the reform in time reckoning was brought about in 1883 has many interesting features. It is told in the history of the proceedings of the American Railway Association, which covers the doings of its predecessors from 1875 to 1893, the General Time Convention and the Southern Railway Time Convention, which united and formed the present association.

"The first in order of dates to propose that railway time should be governed by meridians one hour apart was apparently Charles F. Dowd, the Principal of a young ladies' seminary at Saratoga, N. Y. Others who also reached the conclusion, originally and independently of each other, that the regulation of time keeping by meridians on the even hour apart was the correct theory and desirable, were Prof. Benjamin Pierce, Sir Sanford Fleming, and Dr. Thomas Hill, President of Harvard. Mr. Dowd and Sir Sanford Fleming made elaborate plans for the practical adoption of the theory.

"Mr. Dowd based his first proposition in 1869 upon the local meridian at Washington and afterward shifted it to New York, and then to Greenwich. His plan included the general retention of local time, while the difference between local and standard time was to be indicated and marked at all stations by plus and minus signs. Mr. Dowd devoted a great deal of labor to his plan, which was declined by the railroad officials as being too complicated.

"Sir Sanford Fleming's plan suggested the use of the twenty-four hour dial with letters in place of the numerals. The dividing lines were geographical, and located on the State boundaries. It was circularized by the American Society of Civil Engineers, but was not otherwise presented to the railway managers.

"In October, 1881, Dr. F. A. P. Barnard, with Prof. Cleveland Abbe and Prof. Ormonde Stone, presented the subject of the desirability of a reform in time keeping to the meeting of the railway managers then known as the General Time Convention. The papers were referred to me as the Secretary and editor of The Official Railway Guide.

"On April 11, 1883, I presented my plan, which was adopted. Briefly it provided for an elastic instead of a rigid boundary line between the four sections. It designated every point on the boundary lines where the change from one hour section to the other was to be made. It arranged a method of passing from the use of one hour standard to another without danger of interference or mistake. It suggested a common sense adjustment between local and standard time by the statement that in fact local time would be practically abolished.

"I was able to report that I had secured agreements from the managers of 78,000 miles of roads to put the plan in actual use, and that the co-operation of the Naval Observatory at Washington and the Cambridge Observatory and certain city governments was assured. Among those who helped me most in the accomplishment of securing the adoption of standard time were many prominent railroad officials and men of scientific attainments, notably Prof. J. K. Rees of Columbia University and J. Raynor Edmunds of the Cambridge Observatory.

"Since the adoption of the system in the United States its use has been extended to many parts of the earth. In every country in Europe, with the exception of France and Russia, railway and local clocks are regulated by the time of either the Greenwich meridian or by that of meridians differing exactly one hour or two hours therefrom. South Africa, Australia, Japan, the Philippine Islands and Porto Rico also base their time reckonings upon meridians differing by even hours from that of Greenwich. In Russia the time differs from the even hour by one minute only. In nearly all parts of the civilized world, therefore, the clocks and the watches, if precisely regulated, beat seconds exactly together, their minute hands point to the same part of the dial—only the hours differ according to the governing meridian."

BLAIR & CO. IN SEABOARD.

New Loan Arranged in Order to Complete Atlanta and Birmingham Extension.

Announcement was made yesterday on account of Blair & Co. and Thomas F. Ryan that they had agreed to furnish a sufficient sum of money to the Seaboard Air Line Railway to enable that road to undertake some necessary improvements, chief among them being the completion of the construction of a new line known as the Atlanta and Birmingham Extension and to take care of the railroad's floating debt.

What the amount of the proposed loan is Blair & Co. declined to state yesterday. They said that the details of the transaction had not been definitely arranged and, in fact, the proposition had not yet been accepted by the Seaboard Directors. It was stated, however, that the proposed loan had the entire indorsement of John Skelton Williams, President of the Seaboard Air Line, and that the loan did not involve any change in the present control of the road, which continues to be held in the South.

One of the conditions under which the loan is offered is that the lenders shall have the right to name a new Board of Directors as additional security. This new board would, it is stated, administer the affairs of the road in the interest of both the stockholders and Blair & Co. These interests, indeed, were said to be identical so far as the present stockholders were in sympathy with the proposed loan, which would result in greatly increasing the earning power of the road.

When Wall Street heard of this loan it jumped to the conclusion that it meant the withdrawal from the road of the men connected with the St. Louis and San Francisco Railroad, who bought a large block

of stock of the Seaboard Air Line in July last. This purchase was at once followed by the election to the Board of Directors of the Seaboard of B. F. Yoakum, H. Clay Pierce, Oakleigh Thorne, and B. S. Guinness. In view of the relations of these men with the Rock Island interests, it was thought that the Seaboard Air Line would sooner or later be brought into the Rock Island fold.

Wall Street was surprised, therefore, to hear of a new interest in the road, and assumed that the Frisco representatives had sold their stock. According to the best information obtainable yesterday, this is not the case. The rumor was then revived that the Southern Railway would now take over the Seaboard. This, however, is denied. Mr. Ryan, who is associated with Blair & Co. in this matter, is acting entirely for himself and does not represent any other road or group of capitalists.

The loan negotiations are being conducted by President Williams of the Seaboard and S. Davis Warfield, President of the Continental Trust Company of Baltimore, which is trustee for the first mortgage bondholders.

BORROWING MONEY ABROAD.

Several Railroads Said to be Seeking to Place Loans in London and Berlin.

London dispatches received in Wall Street yesterday announced that, besides the Great Northern, which had secured a loan of £1,500,000, other American railroads were endeavoring to arrange loans both in London and in Berlin. The dispatches stated that the loans were desired on short-time notes, to be secured by bonds as collateral. Inquiry among several of the banking houses with foreign connections revealed the fact that such attempts were being made by several railroads, the names of which they did not care to mention.

The head of one of the most prominent banking houses in the Street, when asked about the matter, said that it was not at all surprising, but he declined to name any one road. Among the roads which are known to be in possible need of funds are the New York Central, the Erie, the Atchison, and the Rock Island, all of which have big improvements on hand.

The New York Central Directors have been discussing ways and means for financing its terminal improvements for some time without making any announcement. The Erie Railroad has elaborate plans for improvements, and for the purpose of financing them sold \$10,000,000 of bonds, of which, however, it has received but \$1,000,000.