



ESTABLISHED IN APRIL, 1856.
PUBLISHED EVERY FRIDAY,
At 32 Park Place, New York.

EDITORIAL ANNOUNCEMENTS.

Contributions.—Subscribers and others will materially assist us in making our news accurate and complete if they will send us early information of events which take place under their observation, such as changes in railroad officers, organizations and changes of companies in their management, particulars as to the business of the letting, progress and completion of contracts for new works or important improvements of old ones, experiments in the construction of roads and machinery and railroads, and suggestions as to improvements. Discussions of subjects pertaining to ALL DEPARTMENTS of railroad business by men practically acquainted with them are especially desired. Officers will oblige us by forwarding early copies of notices of meetings, elections, appointments, and especially annual reports, some notice of all of which will be published.

Advertisements.—We wish it distinctly understood that we will entertain no proposition to publish anything in this journal for pay, EXCEPT IN THE ADVERTISING COLUMNS. We give in our editorial columns OUR OWN opinions, and those only, and in our news columns present only such matter as we consider interesting and important to our readers. Those who wish to recommend their inventions, machinery, supplies, financial schemes, etc., to our readers can do so fully in our advertising columns, but it is useless to ask us to recommend them editorially either for money or in consideration of advertising patronage.

On the Chicago & Northwestern all fixed signals governing movements over diverging routes (as well as all governing movements on or from side tracks, or in the reverse direction on main lines) are placed low; that is, either on a dwarf post or on the high post about 4 ft. or 5 ft. from the bottom. Thus an engineman running fast has only a single light to look for, where, under the usual practice, he would find two, one above the other, and be obliged to decide quickly which one of the two showed "all clear." This plan has been followed in all new work since 1896, and the officers of the road like it. Where a low signal is on the same post with or alongside of, a high signal, the lamp is covered with a shield and completely obscured when the signal indicates "stop." This substitution of a low for a high signal is brought to mind at this time by a serious train accident, at Altoona, Pa., which appears in the March record. A fast night passenger train was derailed, with loss of life and the destruction of two or three cars, in consequence, apparently, of a mistake in observing signals, on the part of both the engineman and the fireman. (The firemen are required to observe fixed signals and to speak to the engineman; and in this case the fireman says that he did see the signal and spoke to the engineman.) As the engineman was killed, no satisfactory statement of the facts can be made, from the standpoint of the men on the engine; but the account as given in our record is substantiated, we understand, by the position of the switches, signals and interlocking after the derailment. But without attempting to settle the question whether, in this case, the engineman and fireman both saw the lower light cleared and thought it was the upper one; or both made some other kind of mistake; or one made a mistake and the other neglected to look; it is worth while to note that the C. & N. W. practice has features of merit, and that it deserves consideration on account of its four-years' test on that road, if for no other reason.

In a letter replying to our inquiries concerning the Northwestern's practice Chief Engineer Carter says: "This arrangement is based upon the principle that high signals are to govern movements on high-speed tracks in the regular direction of traffic, and signals for diverging routes are to be given by low signals, either on the post or by dwarf signals on the ground, the light at night being shielded so that it will not show at any other time than when the signal is cleared for a diverging movement. All of our night signals are based upon red for 'stop,' green for 'clear' and a combination of red and green for 'caution.' Reverse movements on the main running tracks, and movements on sidings, are controlled by dwarf signals, and at night these are indicated by red for 'stop' and green for 'clear.' The leading idea in the system is, that express runners have the least possible time in which to act, in order to carry out the orders given by the signals, and therefore the signal arrangement should be made the very simplest possible for interpretation by them. Diverging movements and reverse movements are always made at comparatively slow speeds, so that there is not the same necessity for instantaneous action that there is on the part of an engine on the highest speed express trains. The adoption of the above princi-

ples very much simplifies signaling at points where it is necessary to place the signals outside of an adjoining track, as it dispenses with the use of the bracket signal at all points, save where the intervening track is a main running track and operated in the same direction as the track signaled, in which case, of course, the intervening track would be signal event, of course, the intervening track would be signaled as well as the original track. The mental processes of the engine runner are reduced to the very simplest form. He merely considers whether to run, or stop; if stopped, he either gets permission to proceed from his high signal at the proper time, or observes the low signal and takes a diverging route, if that is the movement which he is expected to make. In practice, in making a diverging movement, he would merely get his train under control and would then see the dwarf signal on the right hand side of his track and, accepting it, proceed at a low speed through the route that was set up for him."

In adopting a plan by which high signal posts shall never show more than one light to fast trains at night, the Chicago & Northwestern people no doubt find a renewed satisfaction in their use of green lights for all-clear. If they used white lights they would find that in reducing the number from two (or more) to one, they were increasing the danger of confusing signal lights with lights in houses and in street lamps. On the Pennsylvania Lines West of Pittsburgh, where white is still used for all-clear, a second high light is used on home signals, even where there is no diverging route, so as to aid enginemen in quickly reading the signals. As such a "dummy" light would always show red, it may almost be said to aggravate the trouble which the C. & N. W. has taken measures to avoid. Another interesting feature of the C. & N. W. practice is the recognition (in the low signal) of the principle that the go-ahead signal is more important than the stop signal. This recognition, in this way, cannot be treated as anything great or radical, for the red light at the top of the post answers as a stop signal for the diverging route as well as for the main line; but the shield will be a useful object lesson, nevertheless. A vital principle in fixed signal practice is that an engineman shall never pass a signal post until he sees an all-clear signal for the route over which he is to travel. From this it logically follows that the stop indication is unnecessary, as the absence of any indication means "stop." In the C. & N. W. low signal for diverging routes we see this theory exemplified (though only at night); and it may be that after a while we shall come to abate the awe in which we now hold the red light.

Anyone who wishes to fully understand the latest phases of opinion concerning the proposals to amend the Interstate Commerce law should get the report of the two hearings given by the Cullom (Senate) Committee on April 6 and 13. On these dates Messrs. George R. Blanchard, Aldace F. Walker and Walker D. Hines presented arguments against giving the Commissioners the power to put their rate-changing orders in force pending appeals by the railroads to the courts, and Commissioner Prouty argued in favor of the proposition. It is embodied in the Cullom bill (Senate 1,439) heretofore described in the Railroad Gazette, which enlarges the powers of the Commission in several particulars and orders uniform classification. Representatives of certain trade associations also appeared for the bill, but their argument was less cogent and forcible. One of them, however, got the Government to bear the expense of printing 107 pages of newspaper articles in favor of the Cullom bill. There is little in any of the arguments on either side that is new; but the two pamphlets make a good compendium of the whole controversy. This last statement we must, of course, qualify by telling the reader that the several addresses, papers and cross-examinations make 150 pages, so that the matter is not very easy to read. The Senate Committee should now be pretty well informed as to the real nature of the railroad problem, though whether the members could intelligently impart even a tittle of their information to the whole Senate is a matter of grave doubt. Whether or not the Senate intends to really consider the question at this session is, indeed, uncertain, though the millers and some other organizations which desire the amendment have lately quickened their pace and it is reported that they are working to bring matters to a head. Senator Cullom also is said to be disposed to bring to an end the long and inconclusive work of his committee.

Mr. Blanchard's address was very full and detailed. He takes up each point in the Cullom bill by itself; and in presenting his arguments against it gives examples from his own experience to illustrate and enforce his point. He was cross-examined by Senator Tillman and by other members of the committee, but we cannot see that they weakened his position in any material point. Mr. Blanchard said he appeared at the request of the New York Central,

the Pennsylvania and the Baltimore & Ohio roads. After giving his criticisms he told how he would amend the law; but in this matter he was, he said, speaking for himself, not for any particular road or roads. He would enlarge the Commission to seven members and would have hearings held at regular periods in different places, after the manner of the district courts. Complaints received by the Commission should be made public in a monthly bulletin. Where important changes in rates are demanded, he would have a tripartite conference of the Commission, the shippers and the railroads. Mr. Walker's argument was presented in writing, the Committee not having time to hear him. It is a strong and philosophical discussion of state regulation. He would have Congress do little or nothing at present except to (1) repeal the anti-pooling clause, and (2) legalize traffic agreements among railroads. This does not specifically mention the legalization of pooling, though it would appear from the general tone of the argument that that is what is meant; and Mr. Walker says that the present anomalous condition of the law should be changed whether the railroads ask for a change or not. Mr. Walker thinks a uniform National freight classification would be practicable. Mr. Hines' argument covered few points not dealt with by the other two, but he was particularly lucid on cross-examination; and he was complimented by the Chairman as an impartial witness, or "as near that as he could be and be employed on one side"; and yet, as thereader will readily understand from articles of his which have appeared in the Railroad Gazette, he presented a powerful and incisive criticism of the demands of the Commissioners for more authority. All of these three gentlemen criticized the 60-day limit for changing rates, and other impracticable features of the bill.

Mr. Prouty sustained the position of the Interstate Commerce Commission in a masterly manner. He set forth the facts of cases like the Danville complaint (reported in these columns April 13), so as to show in the most striking way the evils of the present situation. He emphasized the omissions of the other speakers and enlarged on the delays of the law. Messrs. Blanchard and Hines maintained the sufficiency of the statutes as they now are, but Mr. Prouty showed how it takes four years to get a rate changed, and how, theoretically at least, we may expect that an obstinate railroad can stave off reductions for 25 years. In controverting Mr. Blanchard's claim that only a railroad man of long experience can deal with freight rates, Mr. Prouty waxed vigorous. He said:

These gentlemen further say that these questions ought not to be left to the Interstate Commerce Commission, because no commission can ever be secured competent to deal with questions of that kind. Here are five commissioners—and again I say nothing of the present commission—holding office for six years, devoting their entire time to the consideration of these questions, familiar with traffic matters in all parts of the United States, and I am told that that sort of a commission cannot understand and intelligently pass upon these rate questions. And what then? Must the coal trust grow richer, the coal many increase, the beef trust grow rich, the coal trust wax mightier upon these rate preferences and discriminations because no tribunal can be found outside a railroad employe who can intelligently pass upon that question. What supreme nonsense! Did God Almighty exhaust the rate-making stock when he created George R. Blanchard? Can nobody understand a traffic condition unless he be upon the pay-roll of a railroad company? Who is to-day the arbitrator between the Santa Fe Railroad and its shippers? Aldace F. Walker. Is Aldace F. Walker when hired by the Santa Fe at a salary of \$30,000 or \$25,000 a year more competent to pass upon questions between that company and the public than when he was a disinterested party hired by the Government of the United States as interstate-commerce commissioner at a salary of \$7,500?

The thing now most necessary for the purpose of making the National "railroad problem" clear to Congressmen and the people is a public debate. These hearings before the Senate Committee brought out all of the arguments on both sides, but neither side was questioned by the other, and there was little discussion on common ground. If Mr. Hines and Mr. Prouty could be brought together, before a board of three referees, they could do a great public service. They would clarify the great mass of material on this subject which has been laid before the people during the last two years, but which has not been thoroughly digested. The commissioners claim that the Cullom bill does not grant rate-making powers, while the railroads claim that it does; apparently the truth that lies between these two extremes has never yet been formulated by any person or body which the public looks upon as thoroughly impartial. The two evils—rates which are public but are too rigid, and rates which are secret, unlawful and not rigid enough—are being constantly confused, and no Congressman seems to be able to