

Maine carried out 19 separate projects during the last winter, involving extensions of C.T.C., remote control, combinations of interlockings and the replacement of obsolete signaling, as explained in an article elsewhere in this issue. It is true that this Boston & Maine program was financed by a government loan; but many other roads have just as good credit with the government as the Boston & Maine. The situation as to signaling on the B. & M. was just as good or better than that on numerous other roads; the reason that the extensive program was inaugurated and carried to completion so efficiently was that the signal officers were active in presenting a clear explanation of the opportunities to effect savings and increase efficiency by modernizing the signaling and interlocking facilities.

The depression appears to be passing, general business seems to be on a gradual upgrade, and with the continuation of these trends financial problems will clear so that funds will be available. The railroads are "clearing their decks" as to cars and locomotives so that they may be prepared to handle increased business on an efficient and economical basis. Unless signaling is to lag behind in the improvement program, investigations, plans and estimates should be started now to include numerous projects of rehabilitating signaling, combining interlockings, extending C.T.C. and adding cab signaling. By doing the preliminary planning now, a lot of rush work entailing snap judgment and errors will be obviated later.



## Collision on the Erie

ON APRIL 25, there was a head-end collision between two freight trains on the Erie near MQ Crossing, N.Y., which resulted in the injury of three employees. An abstract of the report of the Bureau of Safety I.C.C., concerning this accident follows:

The accident occurred on that part of the New York Division designated as the Graham Line, which extends between Graham, N.Y., and Newburgh Junction, a distance of 42.2 miles. In the immediate vicinity of the point of accident this is a double-track line over which trains are operated by time-table, train-orders, and an automatic block-signal system; one of the trains involved in this accident was being operated against the current of traffic, this movement being authorized by a train-order. The accident occurred on the westbound main track approximately 4 miles east of MQ Crossing.

Extra 3374, (Symbol Second No. 90), an eastbound freight train, consisting of 46 cars and a caboose, arrived on the eastbound main track at MQ Crossing, where the crew received train-order 2, form 19, which read as follows:

"Extra 3374 east has right of way over opposing trains on the westward track MQ Crossing to west end of Moodna viaduct."

Moodna viaduct is near BS Tower, 12 miles east of MQ Crossing. Extra 3374 entered the westbound main track and departed from MQ Crossing at 3:28 a.m. and was traveling at an estimated speed of 30 miles per hour when it collided with Extra 3213. Extra 3213, a westbound freight train, consisting of 65 cars and a caboose passed BS Tower, 12 miles from MQ Crossing at 3:22 a.m., found signal 61-1E displaying an approach indication, and was stopped west of that signal, just before being struck by Extra 3374. The employees injured

were the fireman and head brakeman of Extra 3374 and the fireman of Extra 3213.

Train Dispatcher Beers stated that Train First No. 90 departed from MQ Crossing at 2:21 a.m., and when it failed to arrive at BS Tower at 2:45 a.m. he called the operator at that point and inquired if he had heard it approaching; the operator replied in the negative. Dispatcher Beers then remarked that Train Second No. 90 was closing up and he would probably run it around First No. 90, and instructed the operator to get ready for a form 31 order. He then called the operator at MQ Crossing and told him to copy a form 19 order, after which he issued the following order:

"BS 31—C&E all westward trains  
MQ 19—C&E Extra 3374 east  
Extra 3374 east has right over opposing trains  
on westward track MQ Crossing to west end of  
Moodna viaduct."

After the two operators repeated the order he made it complete at 2:54 a.m. Just as he completed the order the operator at BS Tower called and said that he had heard Train First No. 90 call in the flagman, and about this time the operator at MQ crossing reported that Train Second No. 90 (Extra 3374) had entered the circuit, whereupon he instructed the latter operator to hold this train until he learned what was delaying Train First No. 90, but did not say anything to the operator about not delivering the train order. The operator at BS Tower reported Train First No. 90 as passing at 3:15 a.m. and suggested that train order 2 be annulled if Train Second No. 90 had not left MQ Crossing, so that west-bound Extra 3213 could proceed. At 3:18 a.m. Dispatcher Beers annulled the order at BS Tower, issuing train-order 3 for that purpose, but failed to annul the order at MQ Crossing, thinking that the operator at that point was holding Train Second No. 90. Extra 3213 passed BS Tower at 3:22 a.m., and the dispatcher then rang MQ Crossing with the intention of annulling the order to Extra 3374, but received no response.

Operator Young, on duty at MQ Crossing, stated that after train order 2 was made complete, he was instructed by the dispatcher to hold Train Second No. 90. Trouble then developed with the interlocking whereby he could not lock a derail and he reported the matter to the dispatcher and the maintainer. As Train Second No. 90 arrived he started out to spike the derail, met the head brakeman, and, forgetting the dispatcher's instructions to hold Train Second No. 90, delivered the engineman's copy of train order 2 and a clearance card to the head brakeman; he then spiked the derail, returned to the tower and obtained the conductor's copy of the order, and went outside and gave it to the conductor as the rear end of the train was passing the tower. As soon as the train passed through the cross-over to the westbound track, which was between 3:20 and 3:25 a.m., he notified the dispatcher that it would clear the switches about 3:28 a.m. and the dispatcher then told him that Extra 3213 already had passed BS Tower on the same track.

This accident was caused by the action of the dispatcher in annulling a train-order to the inferior train without first annulling it to the superior train; the operator at MQ Crossing failed to hold the superior train in accordance with verbal instructions from the dispatcher.