whistled for town. If it hadn't, he might have ignored the phone and made a dash for the switch to keep the train on the main track. That's whittling down your margin too, fine.

THERE was no investigation. I never knew exactly how Second 78 got by Oroville without the 31 order, nor what the op at Oroville yard saw which he mistook for Second 78's markers. One thing I do know-I lived a long time that night.

Even then I wasn't yet through with hair-raising experiences for that trick. An extra west, which was being handled by a Mallet, took siding at Belden on a meet order with an eastbound drag. Number 12, a string of varnished cars, was right on time, so the extra west did not have time to go to the next station, Camp Rodgers, for it. But no sooner was the east-bound train cleared than they started

Operator Holbrook was right on the job. "Does this extra west have anything on Number 12?" he asked.

"No," I replied. "Twelve's on time."

"He's leaving here," Holbrook told me. I checked Number 12's time to be sure of my calculations. The train was due out of Camp Rodgers in one minute.

"Maybe he's just pulling down to the end of the siding, for some reason."

"No. sir!" Holbrook was emphatic. "He's leaving town."

"Stop him if you can!"

Holbrook grabbed a fusee, lighted it and dashed frantically from the office. But the head end didn't look back. It was only after the caboose had come around the curve that the conductor saw the fusee. pulled the air and stopped the train. The conductor, of course, thought the head end had received time on 12, and was on the step waiting for his orders and clearance when the caboose hove in sight, to find Holbrook giving washouts with a

The op then rushed back into the office, grabbed the Army phone, which was hooked up there, and rang the soldier who was guarding the tunnel west of Belden. telling him what had happened. The boy in khaki promptly took to his heels down the right-of-way and flagged Number 12. Thus a second catastrophe was averted.

But, as I have said before, our downhill tonnage can't be backed. There was much confusion and delay before the hoghead succeeded, with Twelve's help, in

BELOW: Number 11, the Feather River



backing up that portion which he had pulled out on the main track, so as to be able to "saw" Number 12 out. Meanwhile. other minor troubles developed all over the railroad. The Mountain was on a rampage that night.

Operators can roughly be divided into Express, takes a drink at Berry Creek two categories, sheep and goats. The old-timers, like Holbrook, are invariably on the job; but some of the boomers that hit this pike—and there seems to be an endless migration of them-are worth writing about,

It is permissible here, if an operator is able to take up clearance cards previously issued to a train and destroy them, to restrict the said train still further with a 31 order. All restricting orders, regardless of where issued, must be on 31 form, except where a middle order can be issued. in which case it is permissible to restrict a train on form 19. Presently I will show what this leads to, but first we get back to the clearance-card business.

One night at Quincy Junction. Number 62 was unexpectedly delayed in picking up cars for which a lot of switching had to be done. Upon learning that the train was behind schedule. I sent the op for the clearances. Later he told me that he had them. Accordingly, I issued an order giving 62 a meet with a train called out of Portola at Blairsden.

This was only a few nights after the foregoing and I was still a bit on edge. Therefore I kept inquiring of the boomer about 62. The op's reply was sarcastic.

"Hell, ves, I've got him. He's still switching. Hasn't come in to get his orders vet-he can't get out of town."

But I was uneasy. It didn't make sense that the train would be held up so long.

RAILWAY AGE

September 17, 1932



A Wostern Pacific 2-8-8 2 Type Lacomotive Hauling 72 Loaded Cars up the Feather River Canyon Grade

NEW WESTERN PACIFIC POWER SAVES TIME AND EARNS MONEY

Eastbound Ionnage on the Western Pacific consists largely of fresh fruits and vegetables, which are moved on fast schedules. The hardest pull is from Oroville to Portola, California, in the Feather River Canyon, where there are 118 miles of ascending grade, much of it one per cent.

FORMERLY-

"Fruit blocks" of 60-70 cars, weighing about 3100 tons, were handled by one 2-6-6-2 type Mallet compound, with either a Mallet, Mikado or Consolidation type helper, according to

At least three, and often four, stops were made for water, additional time being lost while spotting each locomotive under the spout.

The fuel consumption per 1000 gross ton-

miles averaged 16.28 gallons of oil, and each helper, returning light down hill, burned about 700 gallons additional.

NOW-

Baldwin single expansion 2-8-8-2 type locomotives are used, each engine handling from 3400 to 3500 tons.

The run can be made with only two water

The fuel consumption per 1000 gross ton-miles is 14.01 gallons-a saving of about 22 barrels of oil per trip up the grade; and there are no helper engines to burn oil while returning light.

Maintenance costs have been materially reduced.

All of which is added proof that-

It takes Modern Locomotives to make money these days!

LOCOMOTIVE WORKS BALDWIN PHILADELPHIA