

mission, as has been since demonstrated; hence the failure of the scheme.

Upon this subject the New York *Independent* of June 6, in a valuable symposium of railway articles covering fourteen large pages, has a paper written by H. B. Prout, editor of *The Railroad Gazette*. Mr. Prout deals with the possible and probable relationships of steam and electricity on railways, defining these in a clear and logical manner, backed by convincing facts and figures. He shows that for railways approximating not more than a radius of twenty miles, and not requiring an average speed of more than fifteen miles per hour, where frequent trains and many stops are necessary, electricity is the coming motive power; but for long distances, heavy trains, and high speeds, he makes it plain that the steam locomotive has nothing whatever to fear from the electric motor, either on the ground of cheapness or adaptability.

One illustration from Mr. Prout's article may be given on the question of cheapness for transportation of heavy loads a long distance at a rapid rate. He takes the cost of a 1,200 horse power locomotive, \$10,000. Then it is shown that the stationary boiler, engine, dynamo and motor to develop in the electric locomotive 1,200 horse power would cost \$75,000 or \$80,000. There is the additional cost of conveying the power from the central power station to the motor on the track, but this is omitted, for even without it the expense precludes the possibility of success as an investment. The interest on the difference in first cost of a 1,200 horse power steam locomotive and a 1,200 horse power electric locomotive would be more than the entire fuel and wages account of an average steam locomotive; thus it would be impossible for the electric locomotive to save the difference in interest on the first cost if it saved all the fuel burned and all the wages of engineer and fireman. Hence it is obvious that in work for a 1,200 horse power locomotive, such as is required to haul a heavy and fast passenger train, the electric motor cannot compete with steam. The steam locomotive can do the work much cheaper where the duty is to take heavy train loads of passengers, at intervals of an hour or two, and carry them eighty or ninety miles in a couple of hours.

On the other hand, if the work is to take up passengers at any point on a line fifteen miles long, and at any moment, and to carry them any short or long part of that distance at about fifteen miles per hour, it is advantageous to divide the 1,200 horse power among numerous mail trains passing a given point every few minutes. In this the electric motor offers great advantages both as to adaptability and cheapness, is cleaner, quieter and handier, and for these reasons must supersede the steam locomotive. On this Mr. Prout concludes that:

For surface railroads in cities there is no question as between the two systems of propulsion. Nobody thinks any longer of using the steam engine there, except in a few small towns where so-called dummy roads still exist. But the steam dummy is destined to disappear, as must the horse, the mule and even the cable, before the greater efficiency of the electric motor. For street work the

electric motor is almost ideal; it is clean, handy and wonderfully flexible. The motorman can run as slowly as he pleases, stop quickly, and when he sees an open bit of road in front, speed up to the greatest capacity of his machine. Thus this power fills the essentials for street railroad working. The fact that many people are slain by the trolley cars is no fault of the agent used to propel them; it is merely a question of intelligent control. But people must not expect to get high speed through crowded streets and safety at the same time; the two things are absolutely incompatible; no human power can reconcile them.

In illustration of the comparative fields of the two powers, there is cited the experience of Minneapolis and St. Paul, where a half-hour service of steam railways, trains making the ten-mile trip in twenty-five minutes, and electric cars in fifty minutes with a six-minute service, the steam railways had to cease operation, because the convenience of the people in getting on and off at any point, instead of only at stations, more than made up for the loss in time. But with a forty-five miles an hour necessity the increased expense shuts electricity out of the question in connection with steam. Under the full showing made, therefore, the line of demarcation which Mr. Prout has drawn between the two powers appears likely to be the one that will gain permanency—that for street car service on city and suburban lines electricity will hold sway, but that for long distances steam will continue as the most available motive power.

OKLAHOMA'S DESTITUTION.

Monday evening's issue of the NEWS contained a press dispatch giving reports of destitution and suffering among the settlers in different parts of Oklahoma territory. It was stated that the condition of the people in various places was one of desperate want; that hunger was their constant companion, and that starvation could be prevented only by giving immediate assistance to the people. The same telegram contained the statement that the reports of destitution previously received had not been believed, because it was thought newspaper correspondents were manufacturing stories on the subject, and because there had been official denial of reported instances of suffering; but the later accounts are convincing people in Kansas and elsewhere that there is some truth in the story of suffering.

For the information of its readers, that they may understand that the reports of destitution in Oklahoma have not been overdrawn, but that the people there are in urgent need of assistance in the way of food, the NEWS gives some extracts from a private letter written on May 31st—nine days previous to the sending of the dispatch referred to—by Elder W. D. Bowring, of Salt Lake City, now laboring as a missionary in Oklahoma. In his letter he says:

Today Brother McArthur and I are at the home of a family of good Saints, near the postoffice of Cedar, in a rural district of Oklahoma. Here crops are an entire failure, and this and one more family of Saints are really suffering for food. In fact, they have now lived on half rations for months past to

my certain knowledge. That ration has been bread, and sometimes pork of a very inferior quality. I have eaten bread and water here last winter, when I could have cried in pity for the seemingly half-fed children. This was the first family in O. T. to embrace and maintain the Gospel; they have ever welcomed the Elders, fed, washed clothes for, and sheltered them, to their very best. Today, the gates of starvation simply stare them in the face.

Elder Bowring then refers to some efforts being made to give temporary assistance to the families he names, whose members he says are able and willing to work—to do any labor to procure food and other necessities of life. He then cites other instances of hardship. Speaking of the inability of even those in public employ to get their pay, he mentions the case of a school teacher who "has been able to draw but \$5 from three months' teaching; so you see treasures of districts are also broke." Other instances are given, with the suggestion that perhaps if the true situation there were realized here, among at least "some of the young men in Utah who spend money foolishly a few dollars could be raised, and some good for humanity, charity, and Israel might be done." Describing the general conditions that have come under his observation among some of the people, he says:

Flour and some rusty bacon are all they have. Sometimes they make a little butter, and at odd times get a few eggs. Even the hens have quit laying for want of food, and stock are starving. I am satisfied if corn falls we will have to leave, for this place is being depopulated. Hundreds are leaving. Yesterday, while in Guthrie, one man sat eating field corn out of a paper sack, while throngs passed by on the street. One Mr. Moody said to him, "Come with me, and I will buy supper for you." The old man declined, saying, "I have my supper in my hand. You go down to the depot, and there are hundreds needing supper worse than I." This is one of many incidents that might be related to show the situation. Crops here are simply gone. Trees seem to be dying, and desolation is approaching everywhere.

These brief extracts from Elder Bowring's letter, which is chiefly directed to other matters than the general destitution, and mentions it only as incidental to other subjects, tell a gloomy tale of the state of affairs in Oklahoma rural districts, and confirm the accounts sent out by the press and other agencies. Surely it is time for the nation to give heed to these calls for assistance, and afford the urgent relief necessary to save men, women and children from the horrors of death by starvation, ensuing upon the failure of crops in Oklahoma.

DR. BRIGGS AND THE SEMINARY

The celebrated heresy case in which Dr. Briggs has for years been a central figure has at last resulted in much criticism of the ruling authorities of the Presbyterian church, in the organs of other denominations, on account of the decision of the general assembly recently in session at Pittsburgh. That body in a communication to the New York presbytery recommended that, inasmuch as obedience