## Communications.

## BLOCK SIGNALING ON SINGLE TRACK.

To the Editors:

I have read with interest the letter on "Block Signaling on Single Track" in your issue of March 3, in which "Mr. A" quotes me as having said that "approximately one-half of our passing track switches coming within the territory block signaled are handled either by switch tenders or from interlocking towers." This gentleman is laboring under a very great misapprehension, since his statement is far from the facts. and I have never made any such assertion. If we had on any section of our territory one-half of the passing track switches interlocked we could operate trains safely by our automatic block signal system without train orders at all through that territory. As anyone who knows the Queen & Crescent line can testify, we have been able to increase its capacity by automatic block signals, not by "hocus-pocus" rules like those quoted by Mr. A, but by a rigid insistence on the sanctity of the automatic block signal indications. We stand alone as exponents of automatic block signaling for increasing the capacity of single track, and have never failed to convince intelligent visitors that our course is justified. When a single track becomes congested with the 31 order and the middle order it is high time that some method shall be introduced for simplifying the operation of trains. This can be accomplished readily on any single track by establishing automatic block signals from one end of the line to the other, with the double result of simplifying operations and increasing the safety of trains.

It is difficult to conduct anonymous correspondence, but if "A" is the officer of a railway, I shall be glad to accompany him over our line.

W. A. D. SHORT, Supt. Signals, C. N. O. & T. P. Ry.

Lexington, Ky., March 12, 1905.

## MIXING FUEL FOR LOCOMOTIVES.

To the Editors:

I have read a proof of Mr. A. Saillot's article on "Methods of Saving Coal on Locomotives." [Published in this issue.— Eds.]

I do not know that any railroads in this country mix their fuel in the manner described in this article, which is perhaps due to the fact that the cost of coal at the mines in this country is lower than in France, but the cost of labor required for mixing is greater. Besides, the fields in the United States producing the various coals required for this purpose are usually so far apart as not to make this process feasible by reason of the cost of long distance transportation. It is observed by railroads drawing their fuel supply from fields of various character that the different coals often do not work well together when mixed on the tanks. This may be due to the fact that the fireboxes and grates suitable for one coal are not adapted to the other. Again, firemen often do not understand that different treatment of the different coals is necessary to obtain the best results. We have in our Arkansas fields a very high grade of semi-bituminous coal, the analysis of which resembles very much the Pocahontas coal. It is practically non-coking, however, and considerable difficulty is experienced with it by firemen who have been accustomed to the use of bituminous coal of a coking character. It has recently been established that this coal briquetted with 6 per cent of pitch makes a fair coke, which leads me to believe that the addition of petroleum refuse would materially enhance the value of this coal, making possible the utilization of a greater proportion of fixed carbon, a large part of which is now lost on account of shortage of sufficient volatile carbon to bring about the most economical combustion. The most satisfactory method of accomplishing the mixture of various coals, or the addition

of bitumen, is, of course, the briquetting process, but for general use I do not think that the time has arrived when this method will be adopted on account of cost, though the progress made recently is most gratifying.

You have undoubtedly made similar inquiries of other parties, and I should be glad to obtain the benefit of observations made by others on this subject.

Yours very truly, CARL SCHOLZ,

Manager of Mining Department C. R. I. & P. Ry. Chicago, March 1, 1905.

## FREIGHT RATES ON THE PRUSSIAN STATE RAILWAYS.

To the Editors:

The history of railway rates has not yet been written. In no country can such a history afford the wealth of varied interests as the United States. But we are fast approaching the time when the material requisite for such a history is passing out of existence; indeed, thousands of invaluable documents have already been destroyed, and it appears to be no one's function to collect and preserve the remaining fragments of classifications and ratesheets illustrative of the early history of railway rates in the United States. No doubt many companies could unearth forgotten sheets, were a systematic attempt made to build up a great collection of documents relating to classifications and rates. The possibilities of such a history are suggested by a pamphlet on "The Development of Freight Rates on the Prussian-Hessian State Railways," which has just been published by the Department of Public Works of Prussia. The first pages recite briefly the economic motives and measures which accompanied the initial legislative acts relating to the inauguration of the Prussian system of state railways.

The writer is aware that The Railway Age has always been opposed to government ownership of railways. However, in order to prove the impracticability and danger of government ownership in the United States, it is not necessary to show its failure in every other country, for Prussia has been conspicuously successful in her operation of the railways. But success in Prussia cannot insure success in the United States; and the very secrets of success there may be the causes of ruin here.

Compare, for instance, the geographical extent of the two countries and the diversities in industrial and social interests resulting from the same. The United States, exclusive of Alaska, is 15 times as large as all Germany, and Prussia embraces about two-thirds of Germany. The well disciplined, trained and tried Prussian official, with centuries of traditions of honor and pride in the public service back of him, finds his place in an elaborately wrought, nicely balanced and well adjusted administrative system, with all the safeguards and checks which a continuous political existence has created. To serve the state to the best of his ability is the pride and honor of the official. In the United States, to be sure, there are thousands upon thousands of men in all grades of the public service, from township assessor and village president to cabinet officer, who give themselves up completely, at great personal sacrifice, to the duties of their respective offices. No standard of efficiency and of honor could be higher than theirs. But every American citizen with his eyes open knows that this is not the dominating spirit of our public life. Our administrations are pervaded by a different spirit, and the misuse of public positions is a matter of daily occurrence. This being so, who is there who is willing to turn over to men of this very type the enormous transportation interests of the United States? The discipline and efficiency which characterize the forces of our great railway companies would, in all human probability, be subverted into mediocrity and irresponsibility. But granted even that this might not occur. Assuming that government ownership in the United States might be made a lever for the reform of our administrative life, there would still be fatal objections to state ownership and operation in this country. These objections lie in the great expanse of our territory and the magni-