

these figures, on the operation of the service for that year, was \$9,520,910, or almost \$10,000,000. Our post office officials, therefore, who look at the service from a revenue-producing standpoint, have reason to hold up their hands in horror at such figures.

Against that apparent loss, however, should be set the savings that were effected by the discontinuance of post offices and mail routes, and the profit derived from the increased amount of mail handled, both by the carriers, and in the city post offices. No figures are given in the report to show what these amounted to.

MAIL DELIVERED MORE VALUABLE

Still another table, published in the same report, places the estimated value of the postage on matter of various classes delivered on the routes during the same year, at \$6,455,075. This shows that as much more mail is delivered on the routes than is collected on them, it is not fair to estimate the cost of the service from the value of the postage collected on the routes.

If we take the combined value of the postage on the material of various classes, both collected and delivered on the routes, we find that it amounts to \$9,057,790. Were half of this sum credited against the cost of the rural delivery service, the loss for the year would show as \$7,593,830.

Some claim that the present method of ascertaining the cost of the service, is to credit the routes with the value of the postage on the mail matter delivered on them. In support of this contention, it is pointed out that the value of the mail a man receives, is a fairer criterion of this value to the post office department than is the value of the mail he sends. Farmers are producers, and have little occasion to mail letters. Business men, however, find it desirable to write them often. Farmers, therefore, cause others to use the mail more frequently than they require to use them themselves.

Were we to accept this contention, the net loss on the service for the year in question, would be \$3,666,250. From this, of course, would be deducted the various savings of which mention already has been made. In addition there should be considered the saving of time and trouble effected by the farmers through not having to go or send for their mail, or do without. As some hundreds of thousands of farmers in the United States receive their mail daily, this saving in the course of a year is a big item that should not be overlooked.

The figures quoted, furnish food for plenty of thought. They explain, in part, why such widely different estimates are quoted from time to time, as showing the cost of the rural delivery service.—H. B. C.

The Distribution of Manure

R. E. Lampkins, Brant Co.

One of the earliest tasks at which the writer was set as a farm boy, was to spread manure just ahead of the plow. The manure had been drawn out to the field, and carefully piled in small heaps. It was thought that if scattered as soon as hauled it would lose its strength by drying. That it must be plowed into the ground while still moist, in order to save it, was believed by all. We did not know then that the ammonia gas which escaped from the freshly stirred heaps of manure was due to the heaping of the manure while moist, and that the stirring of the manure merely liberated the gas which had accumulated in the heap.

At the present time we know that manure loses nothing but water in drying. The production of ammonia only takes place when the manure is loose, in the presence of moisture. If it

only were possible to thoroughly dry the manure as soon as it was dropped we would the most effectually preserve its fertility-giving constituents. This old

quantity a large part of its effectiveness is lost. Thus the 15 or 20 tons of manure to the acre which we then thought to be but a moderate dressing, often produced less effect than half



THE MANURE SPREADER IN OPERATION

The manure spreader is an expensive machine to install, but where a farmer has any considerable amount of manure to handle annually, the spreader will invariably pay him handsome returns upon such investment.

way of handling manure in small piles, was the most wasteful that could have been devised. It encouraged the constant production of ammonia, and its dissipation into the atmosphere. The ammonia of the average ton of fresh manure would cost, were it to be purchased in the fertilizer sack, not less than a dollar and a half. Its phosphorus and potassium would cost about half that money. Thus we see that it is well worth saving. With the primitive method of distributing manure, very imperfect spreading was the result. Turn the fork as I would, there would be lumps of manure here, and uncovered spaces

that quantity would have done if properly distributed.

It is practically impossible to distribute manure properly by hand. To do so increases the cost of distribution far beyond that of spreading by machinery. There is little doubt that where there are 100 tons of manure to be distributed annually, the manure spreader will pay 25 to 50 per cent. on its cost each year. As will be seen from the foregoing argument, manure is never more valuable than when fresh. The sooner it can be gotten to its place in the field, the greater will be its effectiveness. One



A TYPE OF FENCE THAT IS RAPIDLY GAINING FAVOR

Woven wire fence is taking the place of older types upon the modern farm. It is not only neat but is permanent and occupies a minimum amount of space. When erected upon live posts, as shown in the illustration, it surpasses all other types. Note the clean fence-row, which is in marked contrast to that shown on preceding page. Fences like the above add to the value as well as the appearance of a farm.

there. An excess of manure was put on in one spot, whereas another was without any. The investigations of our experiment stations have shown that where manure is used in excessive

of the great advantages of the manure spreader is that it is always ready for its work. It makes no difference what the manure is like, it does the best possible job under all conditions.