

material that they now rescue from the scrap pile the yard is paying a net profit of \$25,000 a month. In addition to this they have their scrap sorted and classified, so that they secure the best possible price; and as this will average them from \$2 to \$4 a ton of an increase over what they would receive if the scrap was unsorted, the gross profit from this yard runs into very high figures indeed. I mention this road in particular for the reason that, as I said before, it has gone a little further than any other road on the continent in the handling of scrap and salvage, but other roads have established yards and gone a considerable distance along the same lines. In each case they have shown a good saving or profit, and you would think that with such data available every road in the country would have established yards by this time, but such is not the fact. Like all other questions pertaining to supply, our railways are inclined to side-step this thing and hope that it will work out its own salvation. "Where ignorance is bliss, it is folly to be wise," says the old saw, but where ignorance is loss it is well to get wise.

One of the most mischievous fallacies in the railway world is the idea that the man who uses the material would be the proper custodian of the material, and that the man who makes the scrap is the best man to handle it. Nothing could be more wrong than this. Would anyone with proper understanding claim that the man who throws good material into the scrap pile is the best possible man to take it out again? Good material finds its way to the scrap pile in various ways and for various reasons. Like every other evil thing in the world ignorance plays a large part in this game. But this is not the main reason. Men whose business it is to build and repair cars and locomotives like to have new material for their work, and the scrap pile is always handy to receive the second-hand material that they do not wish to use. Then again being human they frequently make mistakes and requisition for material that they do not require. Again the scrap pile comes in very handy as a grave wherein to bury their error. And as they have in the past not only made the scrap and placed it in the pile, but loaded it for sale, there has been no check on such actions and they have got away with it.

Had I made this statement some years ago it would naturally have been challenged by the men of the department, and it will be challenged today, but I can prove the statement. A few years ago I might have had difficulty in doing so without visiting various shops and inspecting the scrap pile, but today we have the records from the central scrap yards which prove that the condition was very much worse than any of us supposed. Let us look for a moment at a few of the items that are today being rescued from the scrap in the central yards:—Car replacers, coupler springs, locomotive springs, draft rigging, couplers, brake wheels, draw bar followers, nuts, bolts, knuckles, chainings, angle cocks, stop cocks, train line heads and nipples, steam heat heads and nipples, train line hose bag clips, steam hose clips, pulley blocks, shovels, picks, track bolts, track spikes, brake levers, brake cylinders, triple valves. These are a few of the items that are picked from the scrap that require little or no labor expended on them before they are turned back for use. But in addition to these there is much material, that can be worked over at small outlay and used in place

of material purchased, at much less cost.

Anyone going into the business of reclaiming material from the scrap pile must have a thorough knowledge of what he is doing, or he is liable to lose instead of make money for his company. Or to put it in another way, the handling of scrap is a man's job. The better the man the better he will have the job done, and I have yet to meet the man who knows all about it; and this reminds me of a little incident that occurred some months ago. I was discussing this business with a man who is probably the leading scrap dealer of Canada, and I remarked to him that I was sorry that I could not devote more time to this matter, as I did not yet know all there was to be known about it. His answer was, "Well, why should you expect to know all about scrap? Scrap is my business. I have been at it all my life. I do nothing else, and I am a long way from knowing all about it myself." Such a speech coming from such a man helps a fellow to bear up under the load of his own ignorance.

The railway storekeepers of America have been the pioneers in the effort to secure for the railways the full value of their scrap and in the movement that we call reclamation, meaning the reclaiming from the scrap pile material that could be used to advantage. In advocating the establishment of central yards to which all scrap on the railway would be brought for handling, we are up against the idea that to do this will mean extra expenditure. Now the storekeepers claim to be the economy men of our railways, and we would be very poor economy men indeed if we advocated spending money for which we received no return. We claim that we have proved beyond dispute that the central scrap yard is a money saver or a money maker. If all scrap originating on the road is sent to a central yard there is no further labor being spent on it than the mere loading on cars. The labor saved at the various outside points will be more than sufficient for handling the scrap in the yard. Then it has been found that the good useable material rescued from the pile always more than pays for the labor expended. If you add to this \$2 a ton in the selling price of your scrap properly sorted, you will need little further argument to prove that the central yard is a good proposition. If you want actual figures you have merely got to consider a yard that handled 30,000 tons of scrap in the year. If you increase the value of this scrap by \$1 a ton you have \$30,000. Double this and you have \$60,000. It is a bold man who will ask his company to spend money on new ideas, but with such figures as these to back us up we should have the courage to ask for what we require.

In establishing a central yard we should have a self-propelling crane with a magnet. This crane and magnet will do the work of about 30 men in the actual handling of material. But it would go further than that as it will shunt your cars and save the time of a shunting engine and crew. As the cars come into the yard the material should be unloaded with the crane and magnet on to one pile. From this pile it should be carefully sorted by hand and distributed in smaller piles, according to classification, the good useable material being removed at this time. Then when the scrap is sold the crane and magnet can load it again at the rate of 200 tons a day, and right here we can effect another large saving. By hand labor the loading of this 200 tons would cost us about

40c a ton. Loaded with the crane it would cost less than 10c. Some people claim to do it for less than 5c, but I want to be liberal and on the safe side. This will mean a further gain of 30c a ton; and while we are loading at the full capacity of the crane we are making \$60 a day, which would mean that we would pay for our crane in 166 days. How many pieces of machinery does a railway possess that would pay for itself in less time than this? Until the central yard is established we cannot use a crane and magnet for the loading of scrap, for the reason that the scrap is not sorted properly and must be sorted while being loaded. And this brings us to another phase of the question. In handling scrap under the old plan of having the department do the reporting, sorting and loading, we are constantly receiving claims for improper classification. That is, the receiver of the material will always claim the full amount for everything he finds in the car that is below the classification specified in the sale, and this claim must be allowed, and this is a loss that you can put into figures. But you hear nothing from the buyer for material that he finds in this load that is above classification, and this is a loss that you cannot put into figures and that you know nothing about.

In addition to the loss suffered through improper classification there is the other and greater loss that I have mentioned before of the good useable material that is thrown into the scrap by the mechanical people and, when the scrap is loaded by them, sent away to the buyer. What does this amount to? It is a hard question to answer. Most of us will say we don't know. The mechanical man will say it does not amount to anything; of course he will. It is the old plea of not guilty. But it so happens that I have a few figures that I can give you. The storekeepers of the railways in the United States and Canada are today, and have been for some years, helping each other out by passing along information. A friend of mine on a U. S. road had some 200 carloads of scrap to dispose of, and it was to be loaded by the mechanical men. He had been studying this matter and he asked that he be permitted to sort and load the material. He did not have a central yard. He was told never to mind, that the mechanical men had always done it and they could do it again. Well, they did it, but my friend was not happy. You all know the story of the Jew who was told that the ship he was on was sinking and he replied, "Well, let it sink, it don't belong to me." This man was not built along these lines. He felt that his company was losing money, and he wanted to stop the leak; he wanted proof. So he stopped two of these 200 cars that had been loaded by the mechanical people and unloaded them with his own men. He sorted it and reloaded the cars, keeping out the good useable material, then listed up what he had got out of the two cars and priced it. The value of that material was just a little over \$1,800. From two cars taken at random out of a lot of 200. Now do a little figuring and see what the loss was. The two loads had been sold for less than \$1,800, and they contained that value of good material. Do you say that this was an exceptional case? Well then, how about the scrap yard that I mentioned before where they found that of the total tonnage coming in 40% was good material. This is, it seems, strong circumstantial evidence, and men are hanged on circumstantial evidence.