

## A MORNING EXERCISE<sup>1</sup>

THIRD GRADE—FRANCIS W. PARKER SCHOOL

---

PEARL BACKUS CARLEY

Third Grade Teacher

---

The following reports were given by the children of the third grade at morning exercises. They are the outgrowth of a year's work in the study of the history of Chicago, and illustrate one phase of the development of transportation.

Last year the third grade studied about early Chicago, and the different ways of traveling in the early days. We decided to make a train of cars in the sloyd shop. We chose the cars because they are made just outside of the city, and because Chicago is such a very large railroad center, and because going by train is the most rapid way of traveling.

The reason we did not make a passenger train is because there is so much shipping and commerce going on in the city, and the passenger cars are too hard to make.

We also made plans for the truck, the wheels, and the track. We thought it would be nice to give the cars to the kindergarten children.

JOSEPHINE PALMER

---

Two people worked on a car. If each child made one car, there would be too many cars, and we would not get them finished. One worked at the sides and floor; the other one made the ends, the top, and the running-board. We put two coats of paint on them. One child put on one coat of paint, and the other put on the last coat. We grooved the sides and ends with a carving tool to make it look like boards running up and down. We used large staple tacks for the steps. We named each car and planned the lettering. We called the cars the "F.W.P. Fast Freight."

MILDRED ZENOS

---

We did not go to the carshops to measure the cars, as we had all seen freight cars, and we had a good book<sup>2</sup> with pictures and measurements given.

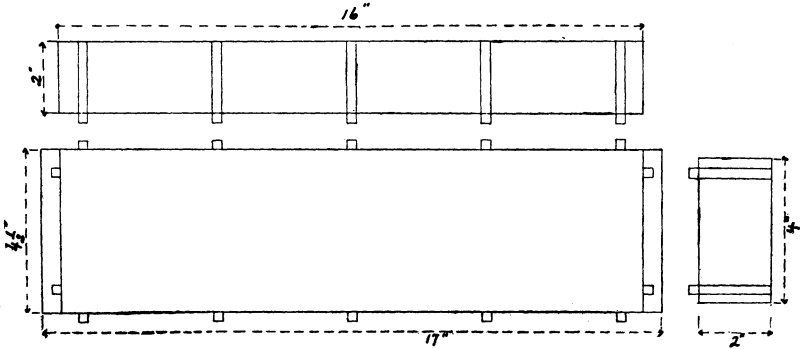
<sup>1</sup>This article is reprinted from the January, 1905, issue of the *Elementary School Teacher*. It furnishes the rounding-out of the series of lessons on the History of Chicago, which have appeared in the issues of this JOURNAL for October and December, 1907.

<sup>2</sup>American Car and Foundry Co.'s publication.

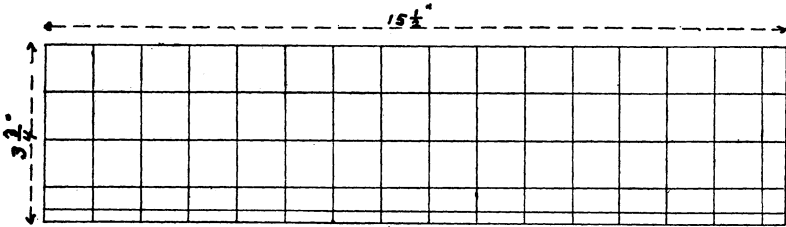
Each child used the book and selected the car he liked the best. I chose the coal car. It was 34 feet long. We decided upon the scale to use in making the cars. We first thought we would make them 1 inch to 1 foot, but 34 inches would make them too long. Then we thought that  $\frac{1}{2}$  inch to 1 foot would be better.

This is the plan of my car.

HELEN STAUFFER



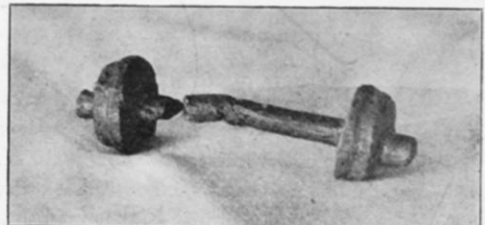
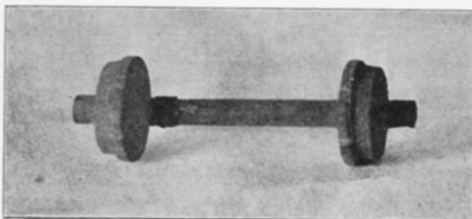
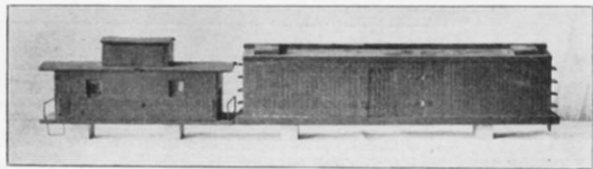
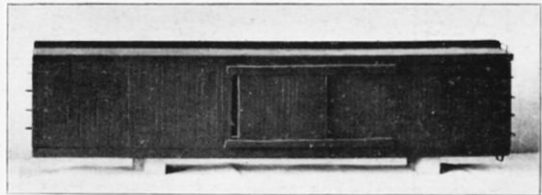
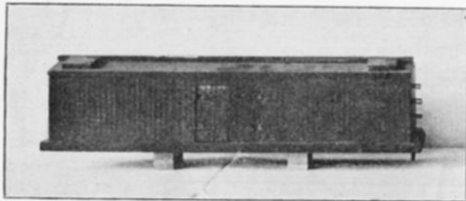
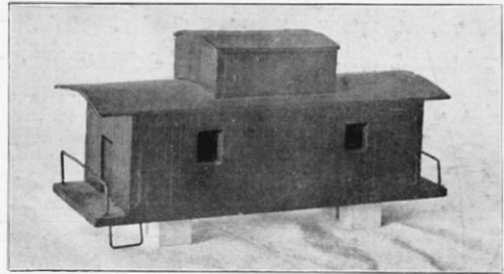
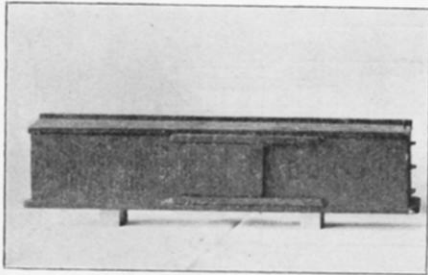
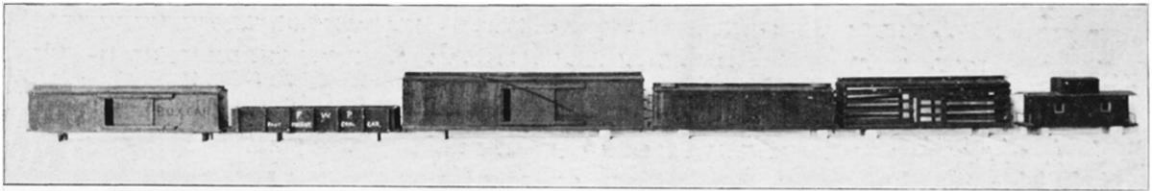
We wanted to know the capacity of our cars. We used inside measurements. The box car is  $18\frac{1}{2}$  inches long, 4 inches wide, and 3 inches high. I made a drawing of the floor of the car. We used 1-inch cubes to see how many cubic inches there were in one layer. We found 74 cubic inches. In three layers there were 222 cubic inches.



I made a drawing of the floor of the coal car too. In the first layer there were  $58\frac{1}{8}$  cubic inches. In two layers there were  $116\frac{1}{4}$  cubic inches.

FRIEDA MAYNARD

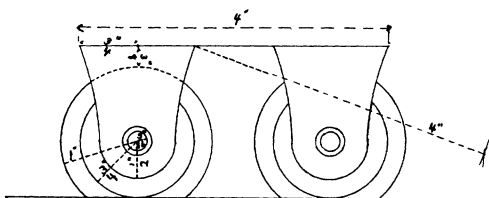
How we made our wheels: We wanted to have iron wheels for our cars, but we could not make them. We used Frank's wooden model for casting wheels in lead because we wanted to know how they cast large wheels. We took two flasks and pounded molder's sand into one of the flasks, and set the wooden wheels half way in. Then we sprinkled dry sand on so that the molder's sand in the other flask wouldn't stick. Then we put the other flask on it and the pegs held it in place. We then took the two flasks apart and



took the wooden model out. We made air holes in the flask on top with a hatpin and a larger hole to pour the melted lead in. We put the flasks together again and poured the lead in the hole. When cool we took the flasks apart and this is the way the lead wheels looked. The reason there are these holes in them is because there were not enough air holes in the flasks and the melted lead couldn't push the air out.

DOROTHY WING

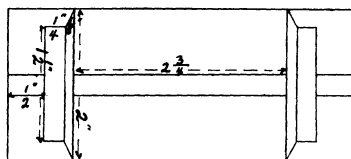
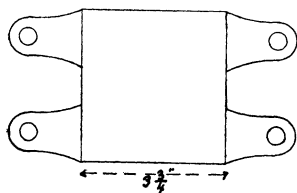
When we made the wheels we used the same scale that we did in making the cars, only we made the flange bigger. The reason we did this is because the little cars are not heavy enough to stay on the track.



I made a model of the wheels on the lathe. Here is the plan of my wheels.

FRANK PACKARD

Everybody in the third grade last year made a drawing for the truck for our cars, and we at last decided upon this one. The truck is made of some metal. It fits on the bottom of the car and holds the wheels onto the car. We are going to screw our truck to the car so it can turn a little when going around curves. We did not plan to keep the side of the truck from hitting the wheels, and if it did the car could not move very easily, so we think we will put a washer between the truck and the wheels. The wheels are  $\frac{3}{8}$  inch below



the bottom of the car. We made them that way so the wheels will not hit the bottom of the car. We shall make the hole that we shall put the axle in larger than the axle, so it will have plenty of room to turn around.

LUCY SMITH

If we were to use these cars we would send the stock car west to the cattle ranches to be filled with cattle and bring it back to the Stock Yards to unload. The refrigerator cars we would send to the Stock Yards, fill with

fresh meat, and ship to the East where the people need it most. The coal car we could send right down in Illinois and fill with coal to help carry on the great manufacturing in the city. The furniture car we could fill with furniture made here and ship west where the people need it most. The box car we could take to Minnesota to fill with grain, or it might be used for any common freight. The caboos is used for the people who work on the train, and the men who look after the stock.

We went down to measure the kindergarten circle, and found it was 16 inches in diameter. We found there was room just outside of the circle for the track. It is to be made in sections so it can be stored away when not in use.

As we have done all we can on the cars, we have asked the big boys to help finish them, so the kindergarten children can use them very soon.

OWEN WHITE

---

There were many problems in arithmetic not suggested in the children's reports, such as finding the capacity of real cars, and finding the number of board feet and the cost of the lumber used in making the cars.