(No Model.)

F. P. GROSSCUP.

HAY CARRIER.

No. 293,451. Patented Feb. 12, 1884.

Fig. 1.

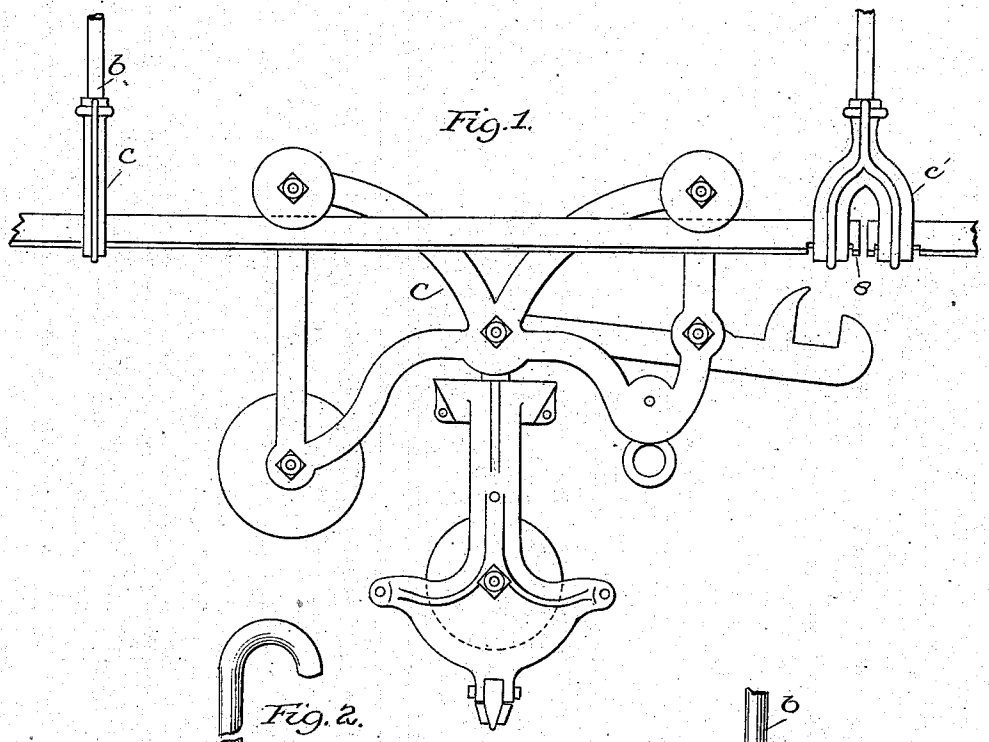


Fig. 2.

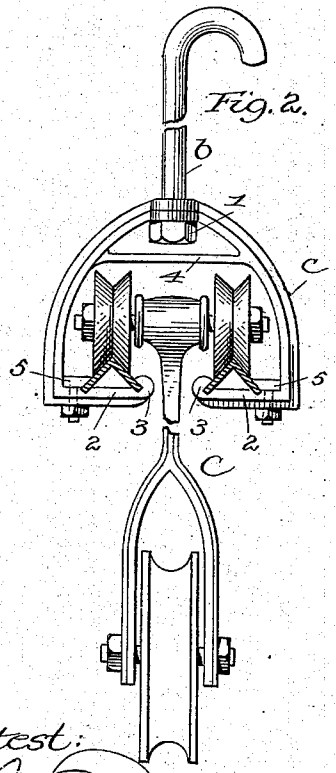
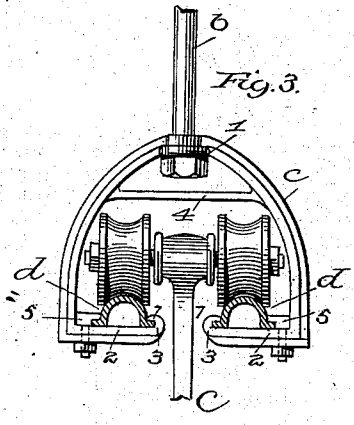


Fig. 3.



Attest:
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UNITED STATES PATENT OFFICE.

FRED PAUL GROSSCUP, OF COLUMBUS, OHIO, ASSIGNOR TO THE COLUMBUS HAY TOOL COMPANY, OF SAME PLACE.

HAY-CARRIER.

SPECIFICATION forming part of Letters Patent No. 293,451, dated February 12, 1884.

Application filed November 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRED PAUL GROSSCUP, of Columbus, in the county of Franklin and State of Ohio, have invented a new and useful Improvement in Hay-Carriers; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improvement in the tracks of a hay-carrier and in the supporting devices therefor. The object of it is to produce a track which can be readily put up by persons who are not skilled workmen, and without the aid of a blacksmith; and, further, my object is to simplify and cheapen the construction, while securing for it suitable strength and adaptation to the purpose.

My invention consists of an improved bracket; of an improved rail combined with the bracket, and in means for connecting the rail to the bracket.

In the accompanying drawings, Figure 1 shows a side elevation of the rail and bracket. Fig. 2 shows a cross-section of the same with the bracket in side elevation. Fig. 3 illustrates a modified form of the rails.

In these drawings, *c* represents the bracket, which is made, preferably, of malleable cast-iron. In the central upper part is a hole to admit the lower end of the suspended rod *b*, to which it is connected by a nut, 1. The upper part of the rod is formed with a hook, or any other convenient means for attaching it to the ridge-pole, or any convenient part of the building. The lower ends of the bracket are bent inward to form supporting-arms 2 2, on the inner extremities of which are small lips 3 3. It is desirable to make the brackets as light as possible, to save metal and to avoid weight in handling and transporting. The tendency of the bracket under strain is to bend in the upper part, which causes the lower parts to draw inward. In order to guard against this without increasing too much the thickness of the upper part, I provide a cross-brace, 4, which I have found sufficient to sustain the strain.

The rails shown in Fig. 2 are made in form of angle-iron. They may be rolled into this form out of sheet metal of from five-sixteenths to three-eighths of an inch in thickness. These are placed, as shown in Fig. 2, with the angle uppermost, resting with their lower edges upon the bracket. One edge of the rail projects under the lips 3, and the other is held down by means of the clamps 5, bolted to the arm 2, and in this way the rails are held securely to the arms of the bracket.

Instead of filing underneath to let the rail drop down over the arm of the bracket, I may file on one edge of the rail and set the clamp into the holder with the same effect. This is the preferable mode, when the rounded form of rail shown in Fig. 3 is used, as it would then require too much filing to make the notch underneath. The wheels of the carrier C are grooved to conform to the shape of the rails. The carrier being suspended from the axle of the wheels, the supporting rods or straps of the carrier run between the arms of the bracket. The form of the rails may be modified—as, for example, to that shown in cross-section in Fig. 3 at *d d*. It is convenient to make these rails in sections of five or ten feet in length.

In order to hold the ends of the section together without the necessity of punching holes, I have provided a form of bracket shown at *c'* in Fig. 1. This is divided into two prongs or branches, 7 7, each branch having the arms 2 2 of the form shown in Fig. 2, and each being adapted to support one end of a rail-section, as shown in Fig. 1. In order to prevent longitudinal movement of the rail-sections upon this bracket, it is necessary only to file a notch, as shown at 8 in Fig. 1, so that when the rail-section is placed upon the bracket the notched end will fit over the arm of the bracket, and thus prevent longitudinal movement thereupon.

The filing can be done by any unskilled person when the track is put up. As the bracket is swiveled upon the rod, it is free to adjust itself upon the rails without the attention of the workman.

I do not limit myself to the precise form of bracket, as it may be of any suitable configuration without departing from the spirit of my invention.

I claim as my invention—

1. The suspended bracket having inwardly-projecting arms with a space between the inner ends for the passage of the carrier-supports, in combination with the rails secured upon said ends, substantially as described.

2. The suspended bracket *c*, having arms 2 2, lips 3 3, and clamps 5 5, in combination with the rails *a*, substantially as described.

3. The suspended bracket *c*, having the arms 2 2, carrying the rails, and a cross-brace, 4, substantially as described.

4. A suspended bracket having divided arms 7 7, adapted to receive the ends of the rail-section, substantially as described.

5. A suspended bracket adapted to receive and support the rails of the track and notched rails held to said bracket, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRED PAUL GROSSCUP.

Witnesses:

L. W. SEELY,

W. C. DUVALL.