July 7, 1925.

1,545,099

E. L. HARRINGTON

CLAM SHELL BUCKET

Filed Sept. 25, 1924

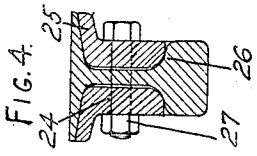


FIG. 4.

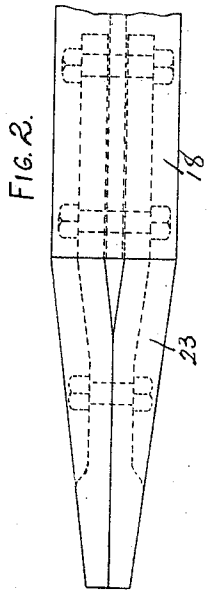


FIG. 2.

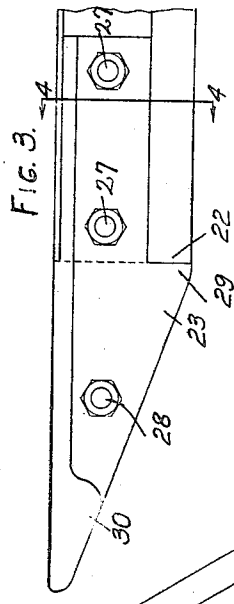


FIG. 3.

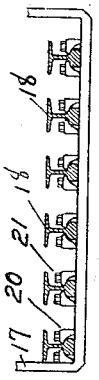


FIG. 5.

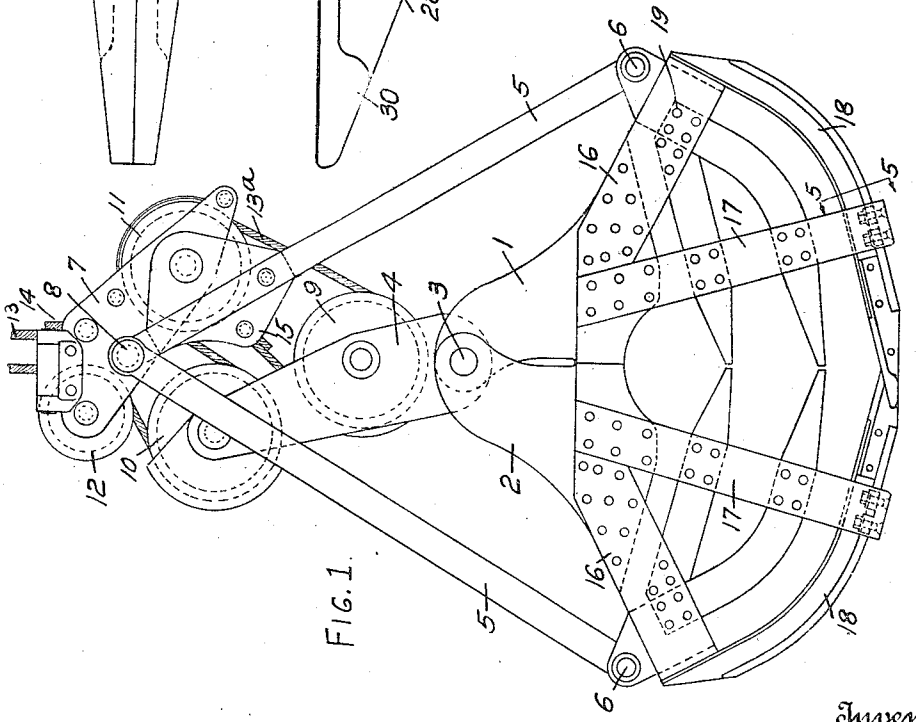


FIG. 1.

Inventor:
Edward L. Harrington
By
W. L. Lesh
Attorney

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UNITED STATES PATENT OFFICE.

EDWARD L. HARRINGTON, OF ERIE, PENNSYLVANIA, ASSIGNOR TO G. H. WILLIAMS COMPANY, OF ERIE, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

CLAMSHELL BUCKET.

Application filed September 25, 1924. Serial No. 739,943.

To all whom it may concern:

Be it known that I, EDWARD L. HARRINGTON, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented new and useful Improvements in Clamshell Buckets, of which the following is a specification.

This invention is designed to improve clam shell buckets, particularly those formed of tines. In carrying out the invention, tines of railroad rail cross section are secured to the frame and provided with detachable points formed of opposing plates with shanks extending along the web of the rail. In this way a very convenient and strong sectioned tine may be provided with a detachable and renewable point.

The invention is illustrated in the accompanying drawings as follows:—

Fig. 1 shows a side elevation of a clam shell bucket.

Fig. 2 an enlarged top view of a tine point.

Fig. 3 an enlarged side elevation of a tine point.

Fig. 4 a section on the line 4—4 in Fig. 3.

Fig. 5 a section on the line 5—5 in Fig. 1.

1 and 2 mark the scoop frames. These are connected by a pin 3. The scoop frame 1 has the closing lever 4. Corner bars 5 extend from the pins 6 on the frames to a head 7, one of the set of corner bars being pivoted on a pin 8. Sheaves 9 and 10 are journaled on the closing lever. Sheaves 11 and 12 are journaled on the head. A lifting cable 13 is fastened at 14 to the head and a closing cable 13^a extends around the pulleys 12, 10, 11 and 9 and is secured to the head at 15. These parts operate in the usual manner.

The frames have the loops 16 and 17. Tines 18 are secured to these loops, the outer ends extending outside the loops 16 and the inner ends inside the loops 17. The outer ends are secured by rivets 19 extending through the flanges of the tines to the outer loop and the inner ends are secured by hooks 20 which extend over the tread portions and are secured to the loops 17 by bolts 21.

The rails have abrupt ends 22. The point is formed by opposing plates 23 which extend in front of the ends of the rails, and these have shanks 24 which extend along the web of the tine, one edge of the point shank having a flange 25 which conforms to and engages the flange of the tine. The opposite edge engages and wedges against the wall 26 of the tread. Bolts 27 extend through the shanks and through the web of the tine and these being drawn up wedge the tine in place between the flange and web tread of the tine in the manner of fish plates on connecting railroad plates. The outer ends of the plates are connected together by bolts 28 and they are provided with shoulders 29 which bring the bottoms of the points flush with the bottoms of the tines. The flanges 24 are slightly thickened at 30 as the point is narrowed, thus giving greater mass to the point.

What I claim as new is:—

1. In a clam shell bucket, the combination of a bucket frame; a tine of railroad rail cross section secured to the frame; a detachable point having shanks extending along the web of the tine; and a bolt extending through the shanks and the web.

2. In a clam shell bucket, the combination of a bucket frame; a tine of railroad rail cross section secured to the frame; a detachable point formed of two plates, one at each side of the tine and having shanks extending along the web of the tine; and a bolt extending through the shanks and the web.

3. In a clam shell bucket, the combination of a bucket frame; a tine of railroad rail cross section secured to the frame; a detachable point formed of two planes, one at each side of the tine and having shanks extending along the web of the tine and having shanks extending along the web of the tine and wedging between the walls of the flange and tread; and a bolt extending through the shanks and the web.

4. In a clam shell bucket, the combination of a bucket frame; a tine of railroad rail cross section secured to the frame; a detachable point formed of two plates, one at each side of the tine and having shanks extending along the web of the tine; a bolt extending through the shanks and the web; and a bolt extending through the projecting ends of the plates.

5. In a clam shell bucket, the combination of a bucket frame; a tine of railroad rail cross section secured to the frame; a detachable point formed of two plates, one each side of the tine and having shanks extending along the web of the tine, the plates having a flange corresponding to the flange

on the tine; and a bolt extending through the shanks and the web of the tine.

6. In a clam shell bucket, the combination of a bucket frame; a tine of railroad rail cross section secured to the frame; a detachable point formed of two plates, one each side of the tine and having shanks extending along the web of the tine, the plates having a flange corresponding to the flange on the tine, the immediate point being thickened from the web; and a bolt extending through the shanks and the web of the tine.

In testimony whereof I have hereunto set my hand.

EDWARD L. HARRINGTON.