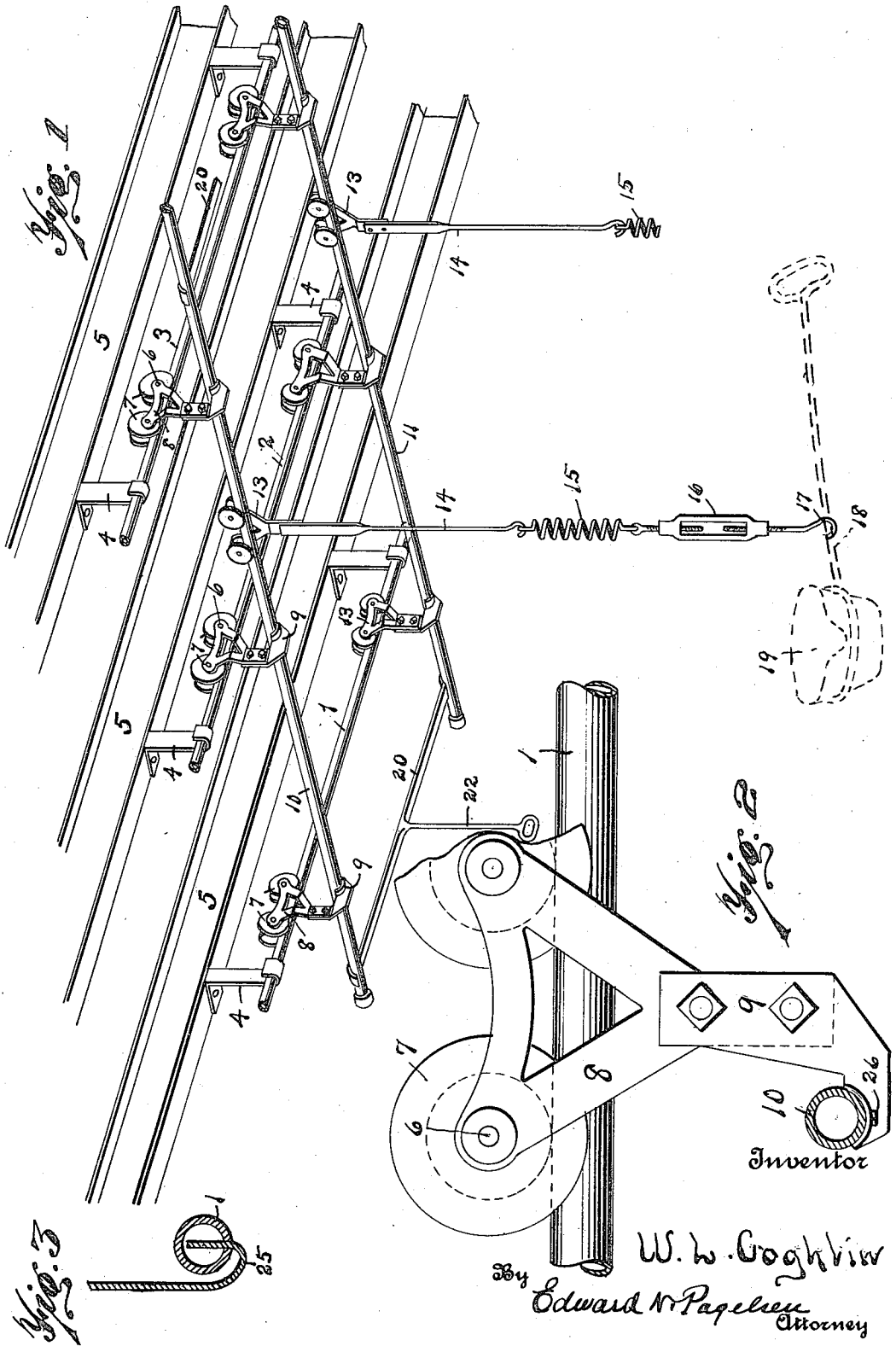


W. L. COGLIN.
OVERHEAD CARRIER.
APPLICATION FILED JULY 21 1919.

1,320,740.

Patented Nov. 4, 1919.



W. L. Coghlin
Edward M. Pagelen
Attorney

UNITED STATES PATENT OFFICE.

WALTER L. COGHLIN, OF DETROIT, MICHIGAN.

OVERHEAD CARRIER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WALTER L. COGHLIN, a citizen of the United States, and residing at Detroit, in the county of Wayne and State of Michigan, have invented a new and Improved Overhead Carrier, of which the following is a specification.

This invention relates to improvements in traveling carriers especially adapted for foundries, and its object is to provide means of this character whereby heavy objects such as ladles of melted iron can be transported to all parts of the floor served by the carrier.

This invention consists of suspended parallel rails and pairs of trolleys mounted thereon, parallel rails supported by said trolleys and extending at an angle to the first set of rails, and trolleys mounted on the second set of rails, said second set of rails being preferably of cylindrical tubing so that the load carried by the last named trolleys may be swung through arcs at right angles to the rails and having said rails as centers. It also consists in providing tension springs between the last mentioned trolleys and the loads to be carried thereby.

In the accompanying drawing, Figure 1 is a perspective view of this improved overhead carrier. Fig. 2 is an elevation of a trolley. Fig. 3 is a vertical section of a rail support.

Similar reference characters refer to like parts throughout the several views.

The upper rails 1, 2 and 3 of this overhead carrier are supported by the hangers 4 which are attached to the beams 5. These rails may be of any size and number, the span between them and the load to be carried determining their dimensions. If desired, they may be formed of tubing and on them are mounted the trolleys having short shafts 6 and wheels 7, and side frames 8 and hooks 9 connected to the frames, to which hooks are connected the rails 10 and 11.

The lower trolleys 13 that run on the rails 10 and 11 are of the same construction as the upper trolleys, excepting that instead of the hooks 9 they are preferably provided with depending rods 14 supporting the springs 15. Turnbuckles 16 are preferably connected to these springs and have hooks 17 to carry the handles 18 of the ladles 19 shown in dotted lines. The turnbuckles permit the ladles to be raised and lowered at will so as to adapt them to flasks of any height.

The rails 10 and 11 are preferably connected by cross bars 20 and these rails and the upper trolleys that support them may be moved back and forth on the rails 1, 2 and 3 as a unit by means of the handles 22, and therefore the ladles 19 can be moved over the entire floor served by this overhead carrier. As the wheels 7 are grooved to fit the rails 10 and 11, the ladles may be swung through vertical arcs of which the rails are centers.

As the melted iron is poured from the ladle, the lip of the ladle swings away from the gate of the flask or the opening into which the iron is to be poured. But as the ladle is emptied, the spring 15 above it will raise the ladle so that the lip will be elevated as it swings away from the gate, the result being that the melted metal will curve outward sufficiently to reach the gate.

In Fig. 1 the lower ends of the hangers 4 are shown to curve around and embrace the rails 1, 2 and 3. In Fig. 3 the lower end of the hanger 25 is shown extending up through a slot in the bottom of the tubular rail 1 while in Fig. 2 the hook 9 is shown secured to the tubular rail 10 by means of a screw 26. The details and proportions of all the various parts may be changed by those skilled in the art without departing from the spirit of my invention as set forth in the following claims.

I claim:—

1. In an overhead carrier, the combination of parallel fixed rails and trolleys mounted thereon, tubular rails supported by the trolleys, a trolley on the tubular rail and having grooved wheels fitting said tubular rail and adapted to move around the rail, and a suspending device carried by the last named trolley.

2. In an overhead carrier, the combination of parallel fixed rails and trolleys mounted thereon, cylindrical rails suspended from the trolleys, a trolley on one of the cylindrical rails and a link depending therefrom, the wheels of the last named trolley being grooved and fitting the cylindrical rail so that the link may swing through a vertical arc with the rail as a center, a spring suspended from said link, and a ladle at the lower end of the link which ladle will be elevated by the spring as the contents of the ladle are poured out.

3. In an overhead carrier, the combina-

tion of parallel fixed rails and trolleys mounted thereon, cylindrical rails suspended from the trolleys, a trolley on one of the cylindrical rails and a link depending there-
5 from, the wheels of the last named trolley being grooved and fitting the cylindrical rail so that the link may swing through a vertical arc with the rail as a center, a
spring suspended from said link, and a turn-
buckle at the lower end of said spring pro- 10
vided with a hook to receive a ladle handle, said turnbuckle providing for the initial position of the filled ladle and said spring serving to elevate the ladle as it is emptied.

WALTER L. COGHLIN.