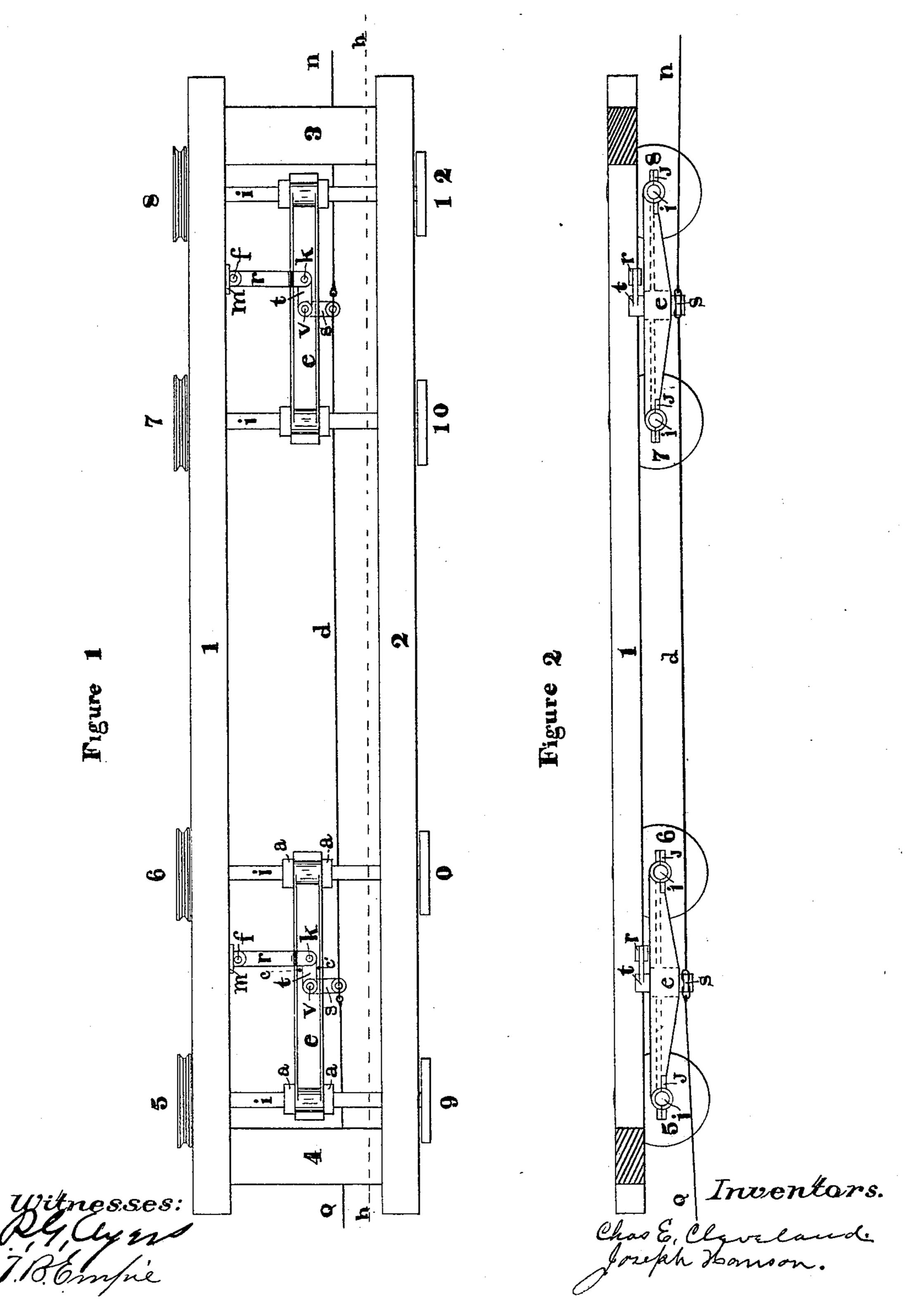
(No Model.)

## C. E. CLEVELAND & J. HANSON.

OFFSET FOR SAW MILL CARRIAGES.

No. 369,982.

Patented Sept. 13, 1887.



## United States Patent Office.

CHARLES E. CLEVELAND AND JOSEPH HANSON, OF FORT WAYNE, INDIANA.

## OFFSET FOR SAW-MILL CARRIAGES.

SPECIFICATION forming part of Letters Patent No. 369,982, dated September 13, 1887.

Application filed November 15, 1886. Serial No. 218,847. (No model.)

To all whom it may concern:

Be it known that we, CHARLES E. CLEVE-LAND and Joseph Hanson, citizens of the United States, residing at Fort Wayne, in the 5 county of Allen and State of Indiana, have invented a new and useful Offset for Saw-Mill Carriages, of which the following is a specification.

Our invention relates to lateral-shifting saw-10 mill carriages; and the objects of our invention are, first, to provide a lateral-shifting saw-mill carriage in which the carriage will positively move sidewise before it will move forward or backward upon its track; second, to provide 15 a more reliable and easier working carriage; third, to secure a lateral-shifting saw-mill carriage by means of connecting the feed or propelling force of carriage direct to offsetting mechanism. We attain these objects by the 20 mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan of carriage with our offsetting mechanism attached, and Fig. 2 a section on the dotted line h h in Fig. 1. Figs. 1, 25 2, 3, and 4 constitute the frame-work of car-

riage, which rests upon the axles i, on either end of which are the wheels 5.6 7.8 and 9, 0, 10, and 12, running upon a suitable track.

The offset proper consists of the castings ee, 30 Fig. 2, secured to the axles i by the lower half of boxes J, the castings e e forming the upper half of box, and prevented from moving sidewise on the axles i by means of the collars aa a a, Fig. 1.

m m are castings bolted to the side timber, l, Fig. 1, of carriage, in which work the connecting-rods r r, secured by the pins ff, and also secured to the arms tt by pins K K. The

arms t t are in turn secured to the large pins V V, which project through the castings e, on 40 the other end of which are secured the arms s s, forming bell-cranks, which are connected together by the rod d.

Q and n represent the feed or propelling force of carriage, in this case a wire rope, al- 45 though any kind of feed may be used, as circumstances may suggest. c and c', Fig. 1, are pins placed in the casting e to form stops for the arm t to strike against, thus regulating the distance the carriage offsets, or the distance 50 moved laterally on the axles i.

If the power be applied to n to move the carriage forward, the rope n pulls the arms ss forward, and moves the carriage laterally until the arms t t strike the stop c; then the 55 carriage moves forward. Likewise, when the power is applied to Q, the rope Q pulls the arms ss back, the arms tt strike the stop c', when the carriage moves back.

We are aware that prior to our invention 60 lateral-shifting saw-mill carriages have been made. We therefore do not claim that broadly; but

What we do claim as our invention is— In a lateral-shifting saw-mill carriage, the 65 combination of the arms t t and s s, forming bell-cranks, connected to side of carriage by the rods r r, and the bell-cranks connected together by the rod d and operated by the feed or propelling force of carriage-cable n Q, all 70 as substantially set forth.

CHAS. E. CLEVELAND. JOSEPH HANSON.

Witnesses:

P. G. AYERS, T. B. EMPIE.