SYLVESTER M. HUDSON.

# Improvement in Wrecking Frog for Railways.

No. 121,875. Patented Dec. 12, 1871.

Fig. 1.

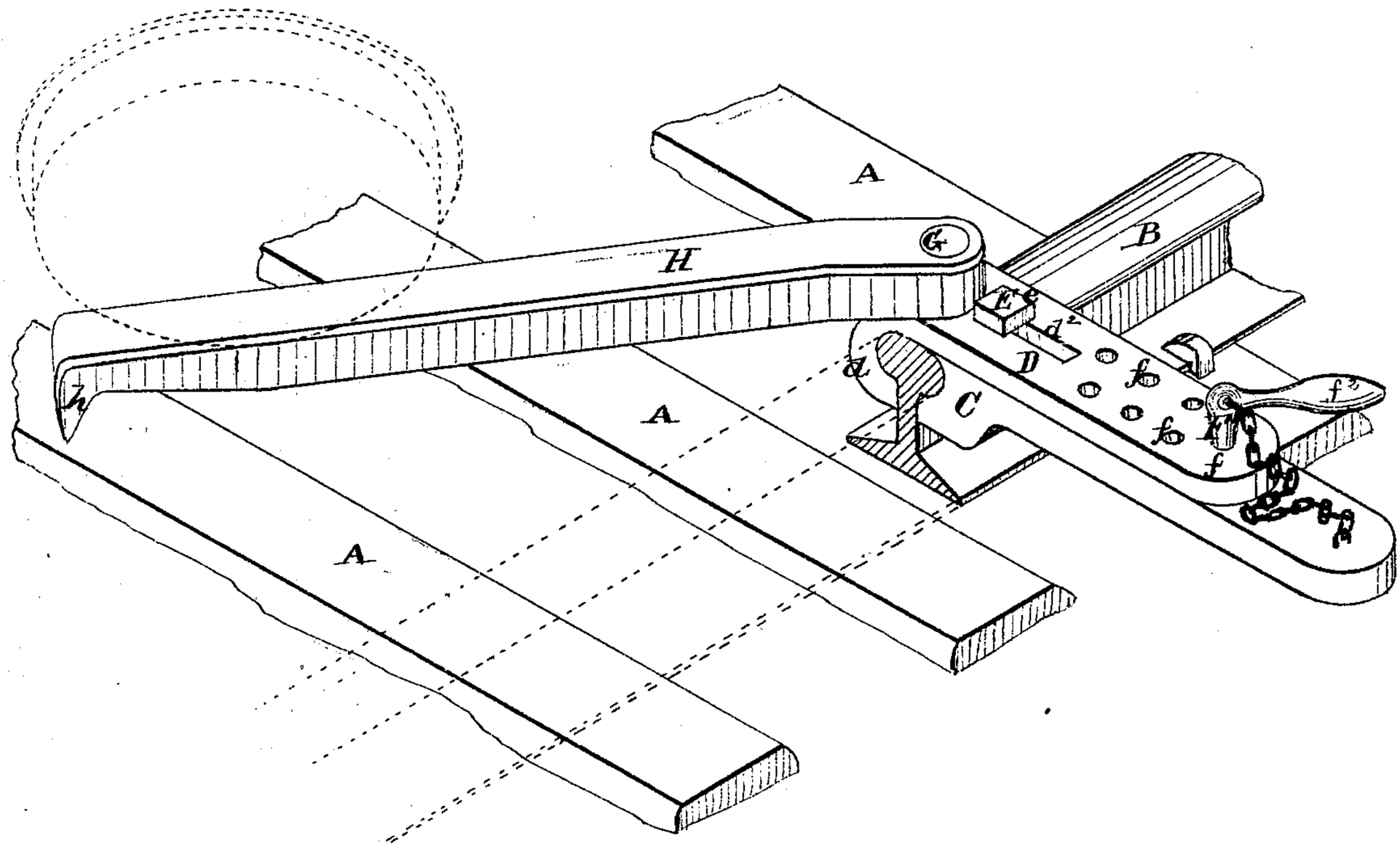
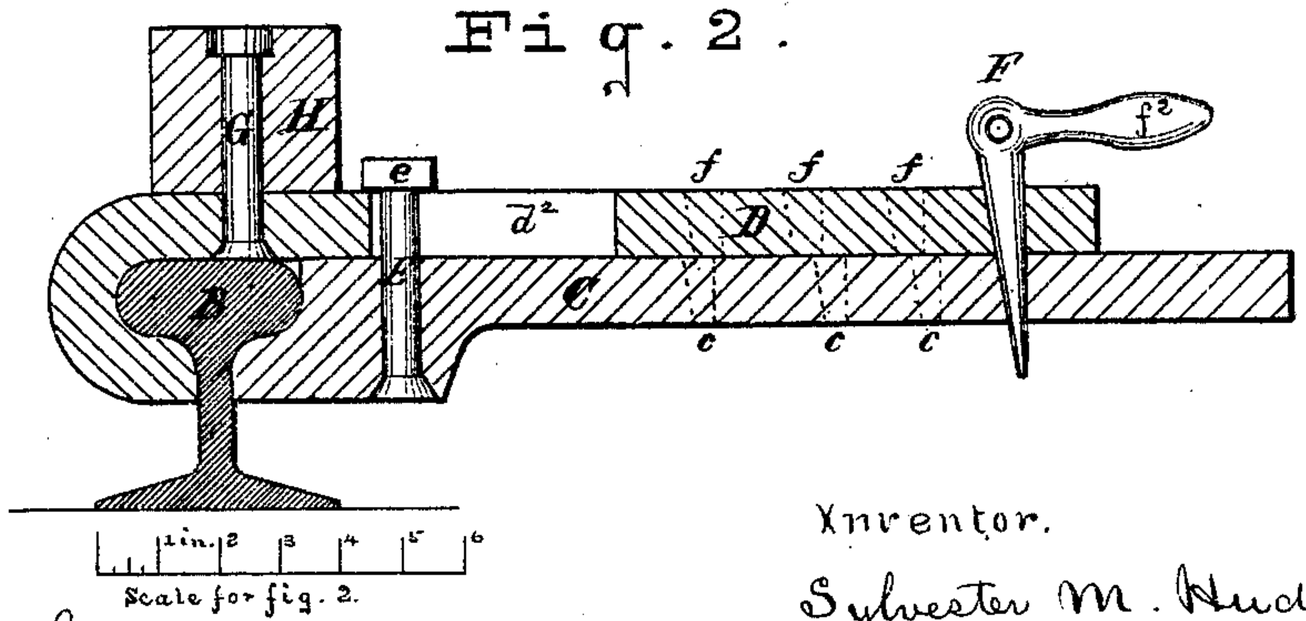



Fig. 2.




Scale for fig. 2.

Attest.
Wm. H. Brereton Jr.
Walter Allen

Inventor.
Sylvester M. Hudson
By Knight Bros. Attys

# UNITED STATES PATENT OFFICE.

SYLVESTER M. HUDSON, OF ST. LOUIS, MISSOURI.

## IMPROVEMENT IN WRECKING-FROGS FOR RAILWAYS.

Specification forming part of Letters Patent No. 121,875, dated December 12, 1871.

*To all whom it may concern:*

Be it known that I, SYLVESTER M. HUDSON, of the city and county of St. Louis and State of Missouri, have invented a certain new and Improved Wrecking-Frog for Railways, of which the following is a specification:

My invention relates more particularly to the device for clamping the upper end of the skid to the rail. The clamp consists of two bars, whose ends grasp the top and web of the rail, and which are held together by a bolt or rivet in one bar that slides in a slot in the other, as shown. The clamping ends of the bars are held tightly against the rail by a pin passing vertically through them.

Figure 1 is a perspective view of my frog, a car-wheel upon the same being shown by dotted lines. Fig. 2 is a longitudinal section through the clamp of the frog.

A are the ties; B, a portion of a rail—the end is in transverse section. C is the lower clamp-bar, whose end is made to fit one side of the head and web of the rail. The bar C has a number of holes *c*, shown by dotted lines in Fig. 2. D is a bar, one end of which has a return-bend, *d*, that fits the opposite side of the rail to the bar C. The bar D has a longitudinal slot, $d^2$, through which passes a headed pin, E, whose lower end is riveted in the bar C, the head *e* of the pin resting upon the top of the bar D to hold the two bars close together, but allow one to slide on the other. F is a pin that passes through one of each of the holes *f* and *c* to hold the clamping ends of the bars firmly against the rail. This pin is made, preferably, of conical form, so as to act as a "drift" to force the ends of the clamping-bars firmly against the rail. The holes *f* and *c* are so arranged in relation to each other that the clamp may be fitted to any rail, however broad or narrow the head may be. G is a pivot-pin extending upward from the portion of the bar D above the rail, and forming the pivot of the upper end of the skid H. The lower end of the skid has down-turned claws *h*, that enter the top of the tie to hold that end of the skid in place. The pin F has, preferably, a handle, $f^2$, as shown.

The skid admits of being swung around about three-fourths of a circle, so that it may be readily applied to a car-wheel in any situation. The frog is used to replace cars upon the track, from one to four frogs being used. The lower end of the skid is placed to the wheel and the car drawn forward, the wheel rolling up the skid and dropping from its end upon the rail.

I claim as my invention—

The wrecking-frog, consisting of the pivoted skid H and clamping-bars C D, constructed substantially as described, and secured by a pin, F.

In testimony of which invention I hereunto set my hand.

SYLVESTER M. HUDSON.

Witnesses:

SAML. KNIGHT,

R. S. BRADLEY.

(120)