(Model.)

H. K. SMITH & A. McQUEEN.

Mail Bag Receiver.

No. 238,173. Patented Feb. 22, 1881.

Fig. 1.

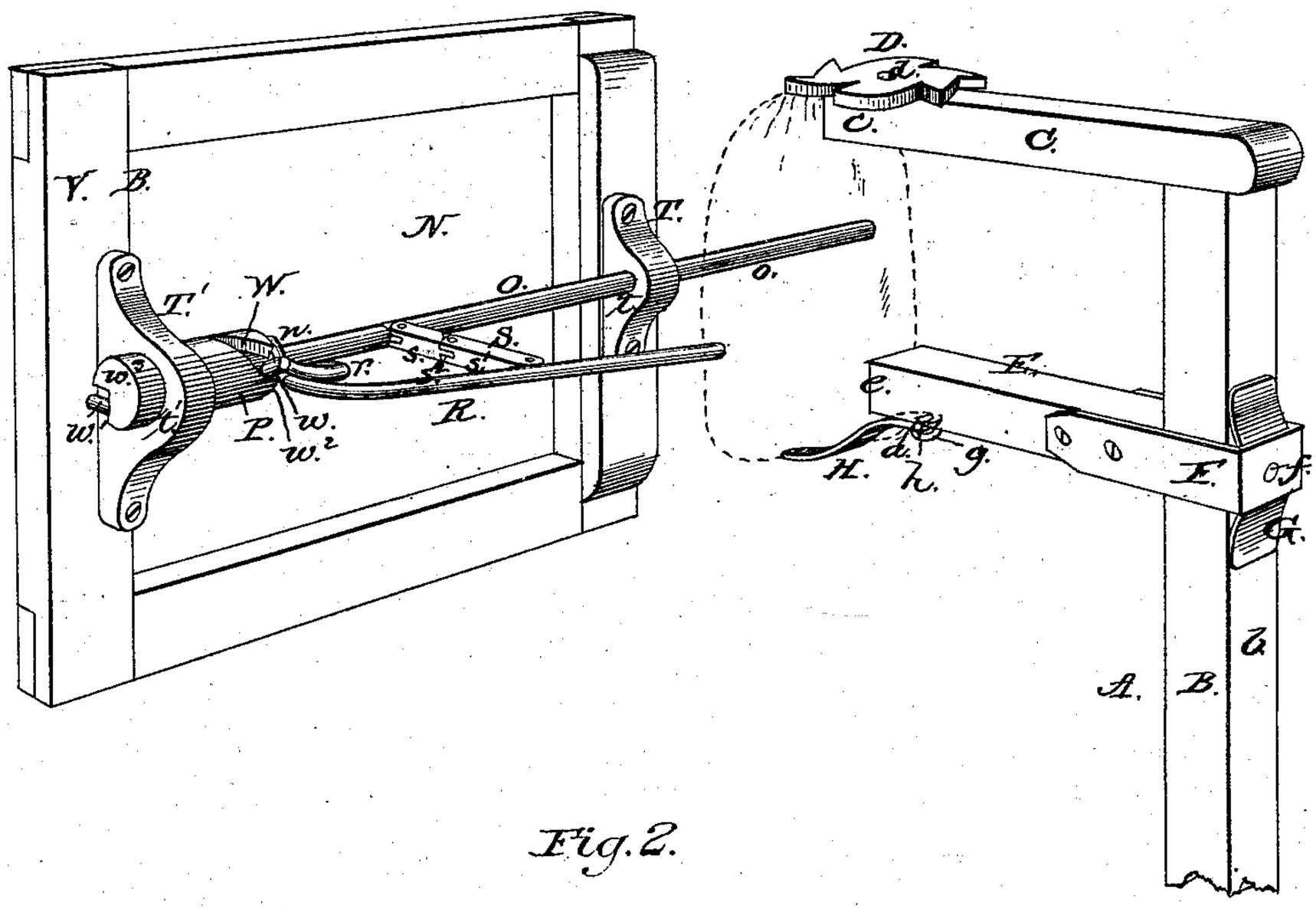
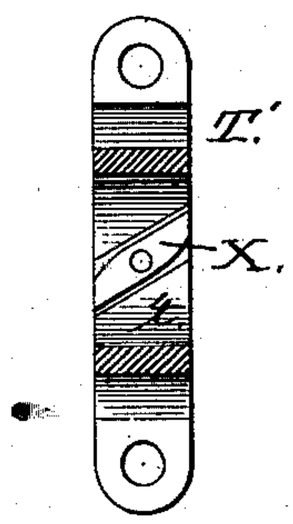


Fig. 2.



WITNESSES

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HORACE K. SMITH AND ALLAN McQUEEN, OF BATAVIA, NEW YORK.

MAIL-BAG RECEIVER.

SPECIFICATION forming part of Letters Patent No. 238,173, dated February 22, 1881.

Application filed December 18, 1880. (Model.)

To all whom it may concern:

Be it known that we, HORACE K. SMITH and ALLAN MCQUEEN, of Batavia, in the county of Genesee and State of New York, have invented a new and valuable Improvement in Mail-Bag Receivers; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a perspective view of the device. Fig. 2 is a sectional detail.

This invention relates to mail-bag catchers, or devices for automatically receiving mail-matter into a car.

The invention consists of a post of peculiar construction to be located upon the side of the track, and a receiver of novel form placed upon the car, all as hereinafter described.

In the drawings hereto annexed, A is a post, consisting of an upright, B, and a top bar, C. At the end *c* of the latter, upon the top thereof, is placed a toothed wheel, D, loosely held by a pin, *d*.

E is a slider-bar, held to upright B by a loop, F, and kept at any desired position by a spring, G, made fast to loop F at *f* and bearing against the rear side, *b*, of upright B. This slider-bar E is arranged parallel to, but is somewhat shorter than, top bar, C.

H is a spring-plate, fastened to the under side of the outer end, *e*, of slider-bar E by a staple, *g*, passing through eye *h*, said plate being loosely connected to slider-bar E, and bearing with its inner end, *a*, against the under side of said slider-bar.

N is the receiver, consisting of a rod, O, having one end made fast in a cylinder, P, a spring-rod, R, having the spiral *r* and encircling-rod O, and fastened to the end of the cylinder P at *n*, and having its length running with that of rod O, and a toggle-brace, S, having its arms *s s'* attached by a joint to rods R and O and connected in the middle by a cam-joint, s^2. This receiver is journaled in brackets T T′ upon the sides of the window-casing V of a car, the end *o* of rod O passing through hole *t* of bracket T, and cylinder P passing through hole *t'* of bracket T′. This cylinder P has cut in its surface, from end to end, the spiral groove W, which runs half-way around the periphery of the cylinder, and has stop-pins *w w'* at each end, w^2 w^3. Projecting into said groove, and having a shape corresponding therewith, from the side of hole *t'* is a guide-lug, X.

The mail-bag is seated upon plate H, having its top resting against one of the teeth of wheel D, the slider-bar E being adjusted to suit the length of the bag. The receiver N is arranged on the car with toggle-brace S open and rod R to the outside, which brings the farther end, w^3, of groove W at the guide-lug X. The position of post A upon the side of the track with relation to the path of receiver N as it passes said post is such that the two rods O and R straddle the mail-bag, and the latter, striking toggle-brace S, causes the cam-joint to be loosened, and the said arms close and gripe the bag. The force of the blow overcomes the friction of wheel D on its pivot, and said wheel, turning, allows the bag to be readily released from the tooth against which its top rests. At the same time the bag, striking the receiver, causes the latter to move backward, and groove W, traveling over guide-lug X, causes the receiver to make a semi-revolution, which throws the bag over, and the centrifugal force thus given tosses the bag into the car through the open window.

What we claim is—

1. A post for holding a mail-bag to be received into a car, consisting of upright B, top bar, C, having toothed wheel D at its end, slider-bar E, held to upright B by a loop and spring, and having a spring-plate, H, loosely held to its outer end, the whole combined substantially as described.

2. In a mail-bag receiver, the combination, with the brackets T and T′, secured to the

sides of the car-door, of the cylinder P, grooved spirally at W, the guide-lug X, rod O, rod R, having spiral *r* encircling the rod O and secured to the end of the cylinder P, and the toggle-joint S, connecting the rods O and R, all constructed and operating substantially as and for the purposes set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

HORACE his × mark. K. SMITH.

ALLAN his × mark. McQUEEN.

Witnesses:
HENRY F. TARBOX,
S. A. SHERWIN.