

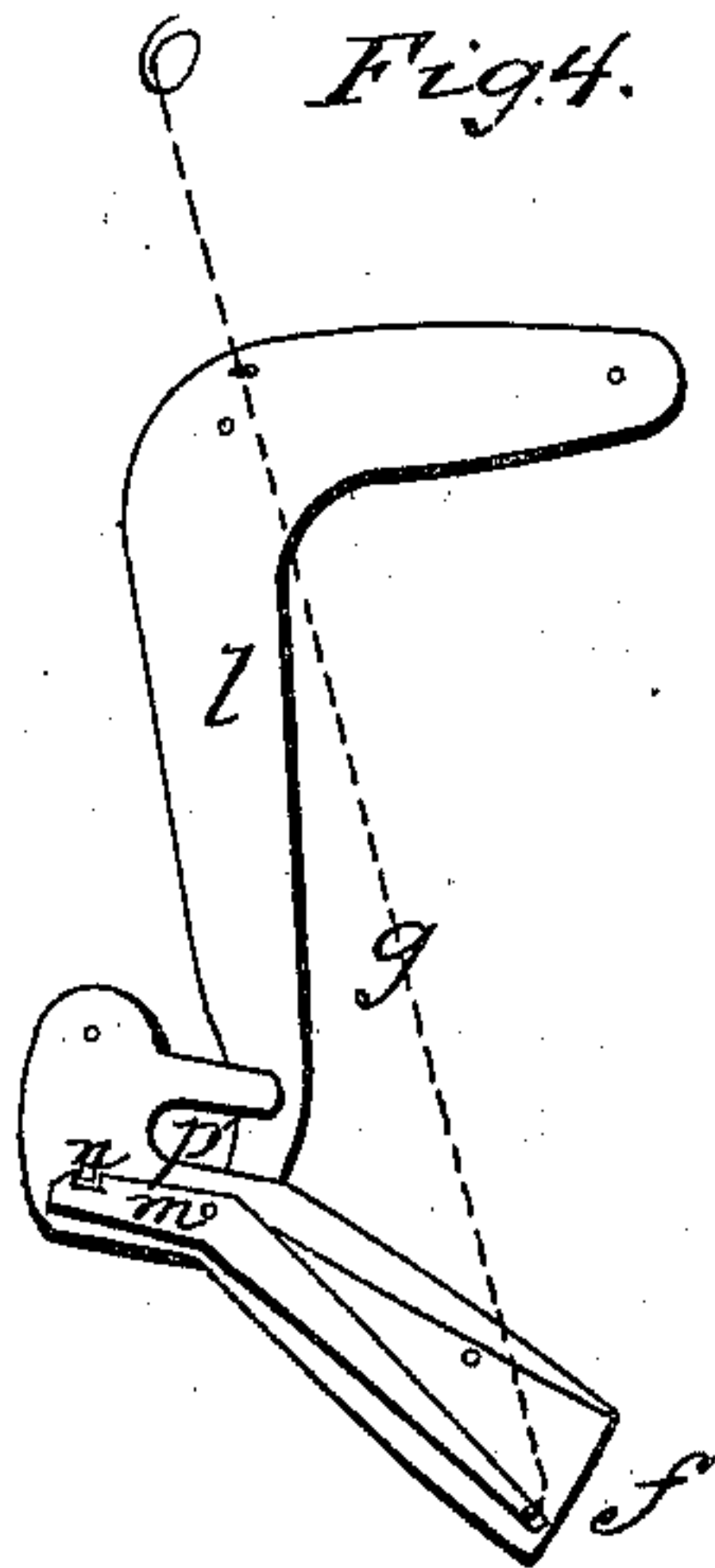
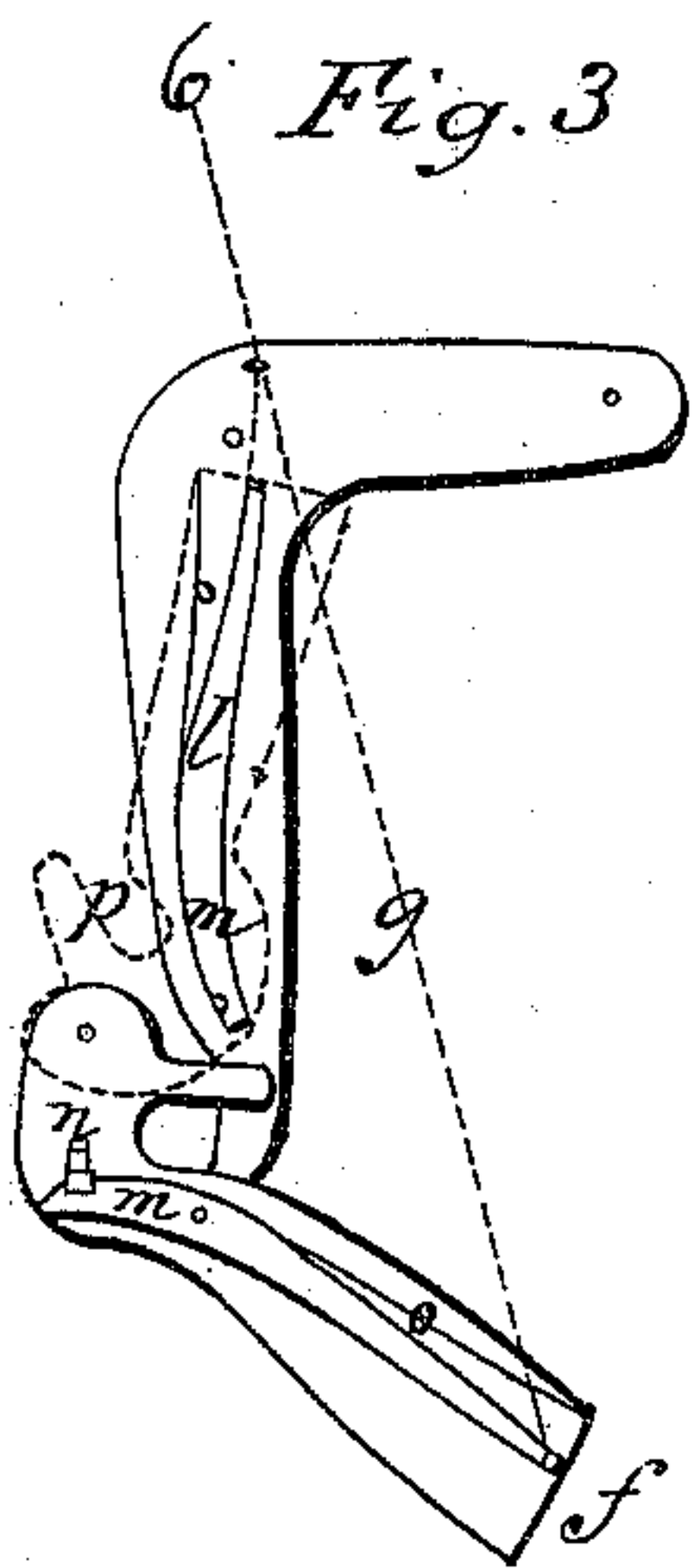
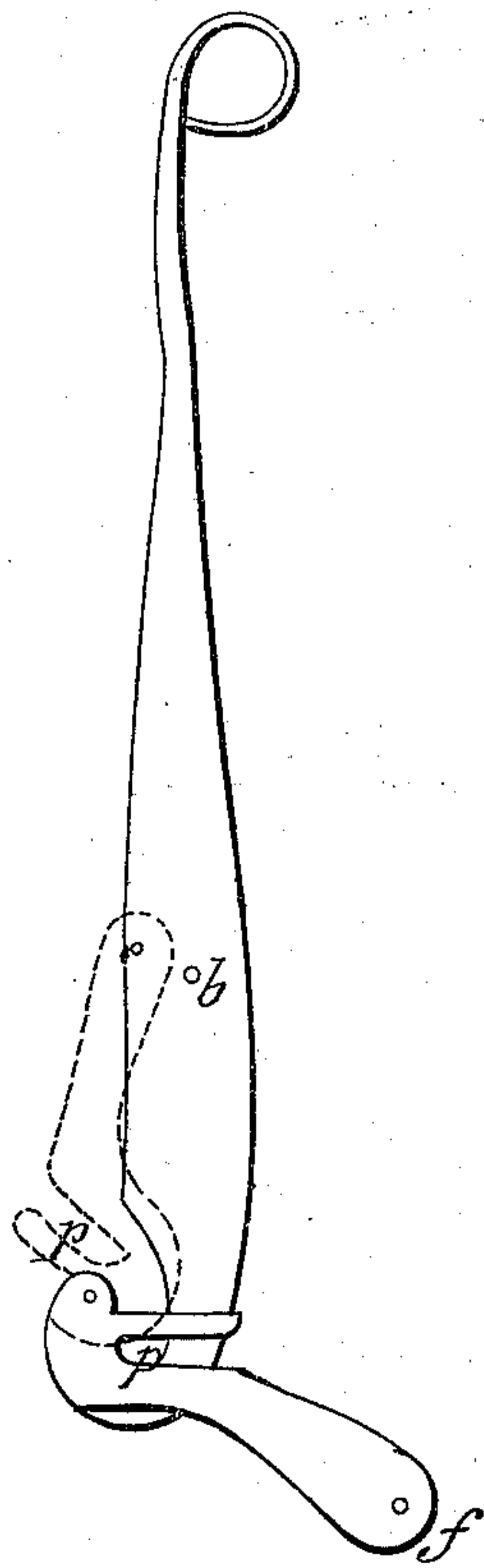
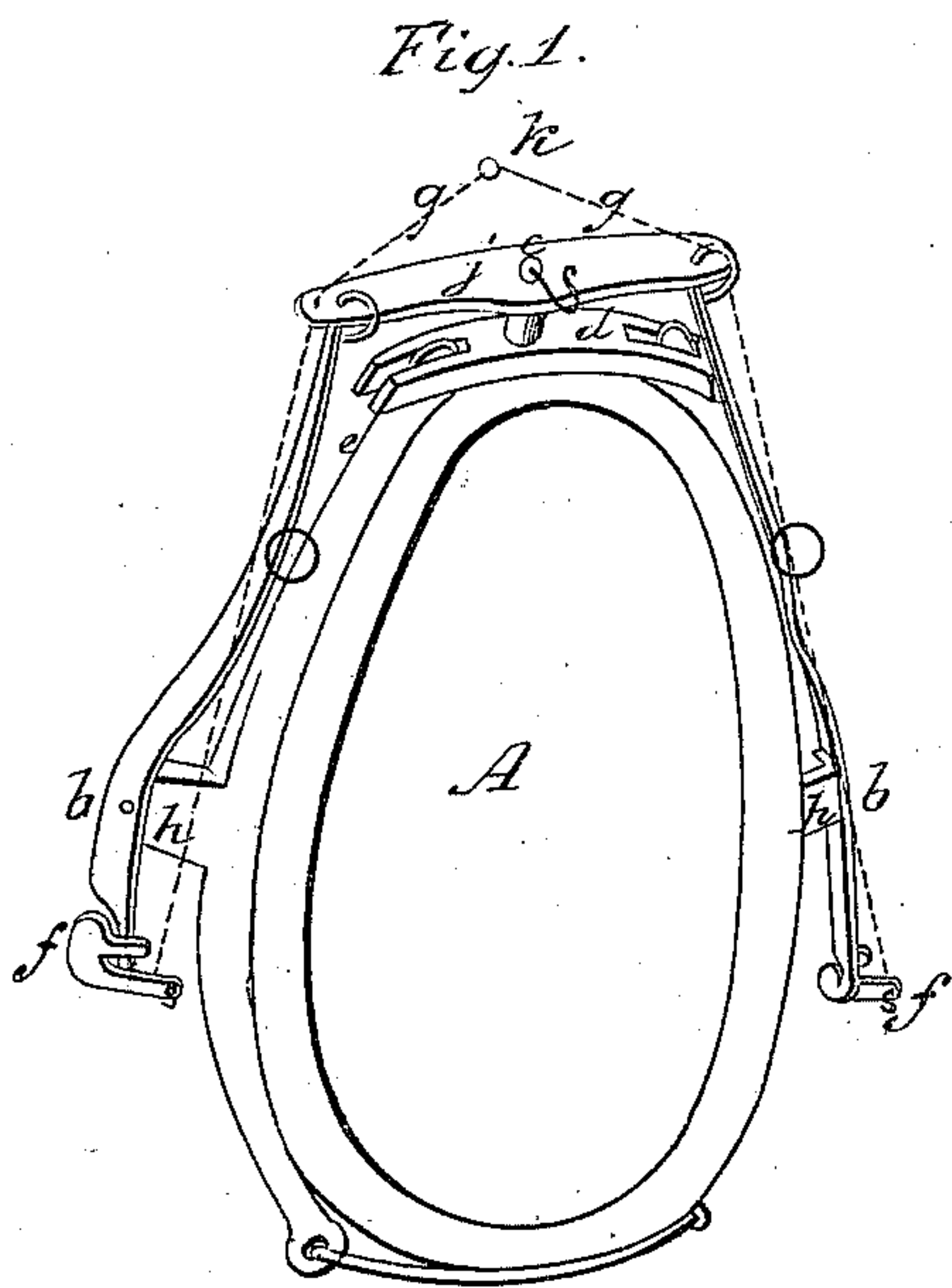
J. L. Kreider.

Harness.

N^o 91,854.

Patented Jun. 29, 1869.

Fig. 2.



Witnesses.

J. F. Andrews.
J. M. Peoples.

Inventor.

John L. Kreider



JOHN L. KREIDER, OF DRUMORE TOWNSHIP, PENNSYLVANIA.

Letters Patent No. 91,854, dated June 29, 1869.

IMPROVED MODE OF HITCHING HORSES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN L. KREIDER, of Drumore township, in the county of Lancaster, and State of Pennsylvania, have invented new and useful Improvements in the Mode of Hitching Horses; and I 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 part of this specification, in which—

Figure 1 is a perspective view.

Figure 2, one of the vibrating arms with its hook.

My invention consists in employing the ordinary collar, or any other form of collar desirable, (fig. 1, letter A,) and ordinary hames *e*, with projections *h* and upper ends *i* flattened, to enter a shear at each end of a stiff pad, *d*, on the top of the collar, to which pad the hames are pinned or hinged.

On top and in the centre of said pad, a pin is placed vertically, on which plays a vibrating bar, *j*, each end of which is connected to the upper end of one of the two vibrating arms *b*; said vibrating arms being hinged, bolted, or pinned on the projections *h* attached to the hames, and their lower ends provided with a hook, *f*, through or in which a clip or ring, attached to the fore end of the shafts, is held.

By drawing back the ring *k*, with its cords *g* attached to the ends of hook *f*, said hooks are raised, as shown by the dotted lines, fig. 2, in which position the horse, in stepping forward, is unhitched.

By attaching one end of a cord to the ring *k*, and the other end in the vehicle, the horse may be disengaged from the vehicle by simply drawing said cord; besides, having the draught at the front end of the shafts, gives steadiness to the running of the wagon, and ease to the horse.

Figures 3 and 4 represent a lock-hook, with the front side removed, to show the lever *m*, the catch *n*, and spring *o*, the operation of which is as follows:

The clip on the shaft is placed in the slot *p*, figs. 2 and 3, and the hook *f* turned down, when the catch at the lever *m* enters the pin *n*, which is held by the spring *o*, and the clip or ring at the shaft is enclosed in the ring *p'*, shown in figs. 2 and 4, formed by the vibrating arms *b*, figs. 1 and 2, or the elbowed levers *b*, figs. 3 and 4, and the lock-hook *f*, figs. 1, 2, 3, and 4.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The stiff pad *d*, attached to the hames, with its central pin, in combination with the vibrating bar *j*, or their equivalents, and the projections *h* in combination with the vibrating arms *b* and connections and hooks *f*, or their equivalents, as set forth and described.

2. A lock-hook, *f*, with its lever *m*, catch *n*, spring *o*, and cords *g*, attached to the vibrating arms *b* or elbowed levers *l*, substantially as described.

Witnesses:

JOHN L. KREIDER.

J. F. ANDREWS,
J. M. PEOPLES.