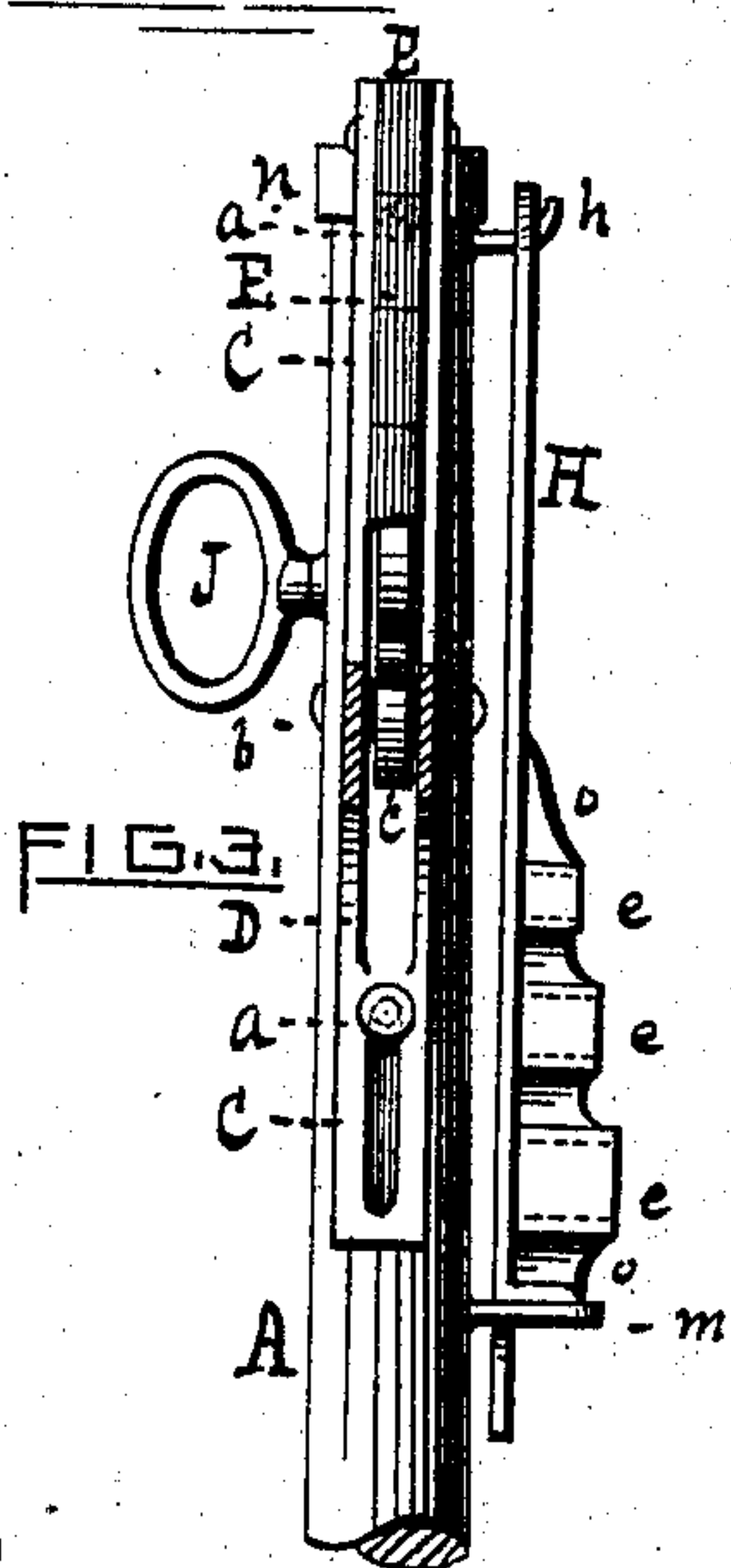
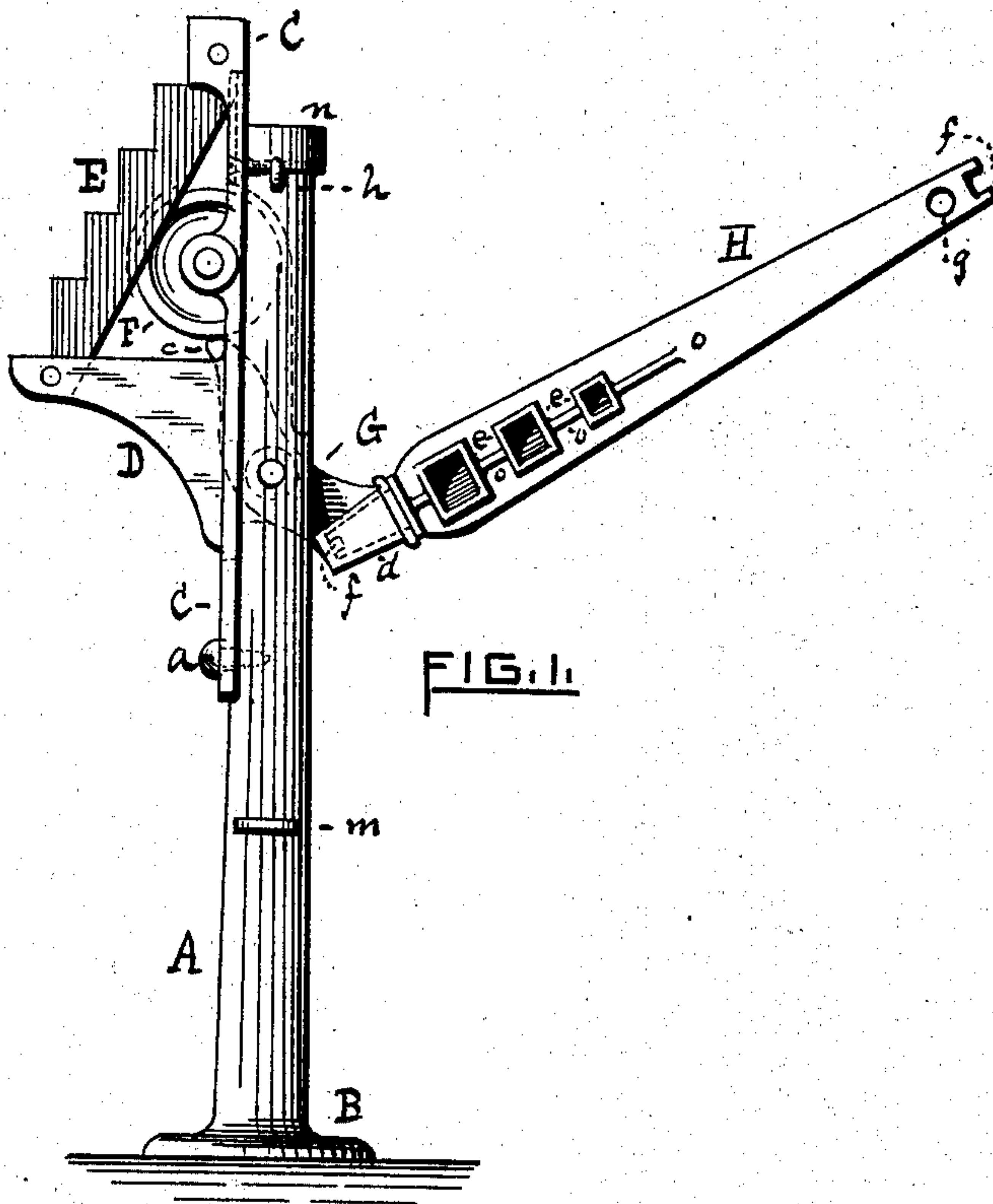
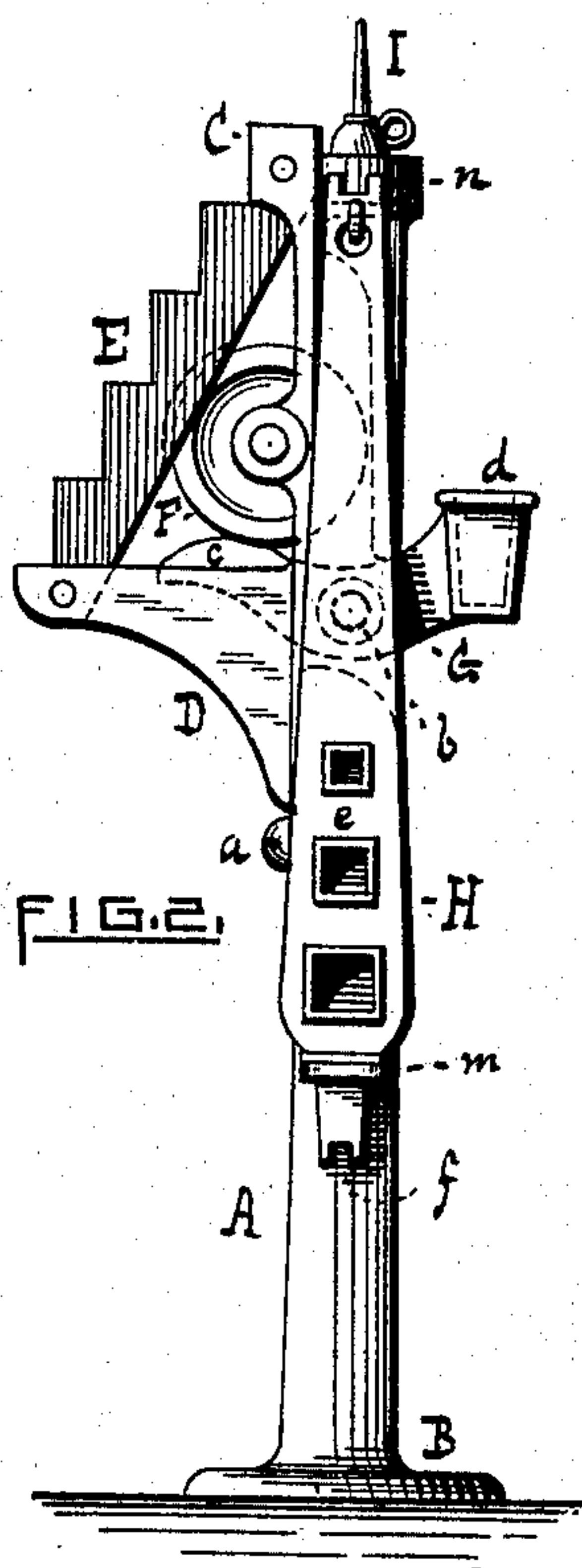


(No Model.)

J. HUNT.
CARRIAGE JACK.

No. 322,180.

Patented July 14, 1885.



WITNESSES,

Wm R Price

Wm H. Hall

INVENTOR,

J. Hunt

UNITED STATES PATENT OFFICE.

JOSHUA HUNT, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF ONE-HALF
TO FREDERICK A. INGERSON, OF SAME PLACE.

CARRIAGE-JACK.

SPECIFICATION forming part of Letters Patent No. 322,180, dated July 14, 1885.

Application filed May 18, 1885. (No model.)

To all whom it may concern:

Be it known that I, JOSHUA HUNT, of the city and county of Providence, in the State of Rhode Island, have invented a new and useful Improvement in Carriage-Jacks; and I declare the following to be a specification thereof, reference being had to the accompanying drawings.

Like letters indicate like parts.

Figure 1 is a side elevation of my invention showing the rack in its highest position. Fig. 2 is the same, showing the rack in its lowest position with the wrench pendent upon the standard. Fig. 3 is a front elevation.

My invention is a jack for lifting carriage axle-trees for the purpose of removing and lubricating the wheels.

It consists, first, of a standard, supporting a vertically-moving rack, which is elevated by means of a bent lever, which lever bears up against a friction-wheel of said rack and is operated by a detachable handle; and, secondly, it consists in providing said handle with nut-holders, so that when detached it may be used as a carriage-wrench.

A standard, A, rests upon a base, B. Upon the side of the standard is a bar, C, which has a longitudinal slot near each end, through which slots screws or bolts *a* pass into the standard. The bar C is thus capable of a vertical motion along said standard, and is confined to a linear movement by the screws *a*. Integral with the bar C is a bracket or arm, D, which has an interior space for the operating-lever to work in. A rack, E, extends diagonally from the end of the bracket D to the top of the bar C, and is slightly grooved or recessed, as shown in dotted lines in Figs. 1 and 2. A friction-roller, F, is mounted within the slotted bar C. A bent lever, G, passes through the standard A and is pivoted, as shown, at *b*. The inner end of the lever moves within the bracket D and is shaped with a cam-edge, *c*. The outer end of the lever G has a socket, *d*. A bar or handle, H, which serves as a wrench, as hereinafter specified, is inserted into the socket *d*. This handle is provided with several nut-holders, *e*, of different sizes, the position and shape of which are fully illustrated in Figs. 1 and 3. At each

end the handle H has jaws *f*, as appears in Figs. 1 and 2, and at one end a hole, *g*, by which, when detached, the handle can be hung upon the hook *h* of the standard. A staple, *m*, upon the standard A, serves to keep the handle in position when detached from the lever and pendent upon the hook. A ledge, *n*, forms a socket or cup upon the top of the standard to hold the oil-can I.

The jack is easily carried by a handle, J, which extends from the standard. (See Fig. 3.)

The operation of my device is as follows: The jack is placed beneath the end of the axle-tree to be lifted, with one of the steps of the rack E in position to raise the same, and the handle H is inserted in the socket *d* of the lever G. By depressing the handle H the inner end of the lever G, by its cam-face *c*, bears up against the friction-wheel F and lifts the bar C and the rack E connected therewith, thus raising the carriage-wheel from the ground. When the lever G is moved into the position shown in Fig. 1 the extreme end of its cam *c* is brought inside of the plane of the line of the axis of the wheel F and occupies a position between said axial plane and the standard A, as appears in said figure. This movement results in bracing or locking the bar and rack from downward displacement. The segmental form of the cam *c* allows it to exert its pressure against the wheel F without obstruction and with the least possible friction. The handle H, when detached from the socket *d*, I utilize as a wrench for the removal of the nut on the end of the axle. For this purpose I form several nut-holders, *e*, of such interior dimensions as to fit upon the axlenuts commonly used, and strengthen said holders by a longitudinal rib, *o*, all integral with the handle H. The jaws *f* at each end of the handle H being of different capacity are useful for setting or loosening the smaller nuts on the various parts of the carriage, and thus the handle H, so furnished, constitutes a convenient carriage-wrench for all purposes, especially as it dispenses with the necessity of any direct contact of the fingers in handling the axle-nuts.

The special advantage of my improved carriage-jack is its compactness and convenient

operation. All things necessary for greasing the carriage-wheels are kept together in snug form and small space. The wrench H serves as a handle to operate the jack, as well as to
5 take off the nut, and when not in use has its place upon the hook *h* and in the staple *m*. The oil-can I is held by the ledge *n*, and so all implements are within easy reach, while the whole is carried from place to place by
10 the single handle J.

I claim as a novel and useful invention, and desire to secure by Letters Patent—

1. In a carriage-jack, the combination of the standard A, having the lever G mounted there-
15 in, the vertically-movable bar C, having the bracket D, rack E, and friction-wheel F, all operating substantially as and for the purpose specified.

2. In a carriage-jack, the combination of the standard A, the hook *h*, the staple *m*, and
20 the wrench H, having nut-holders *e*, and hole *g*, substantially as specified.

3. The improved carriage-jack herein described, consisting of the standard A, base B, slotted bar C, screws *a*, bracket D, rack E,
25 wheel F, lever G, having a cam-face, *c*, and socket *d*, the handle J, hook *h*, staple *m*, ledge *n*, and the wrench H, furnished with hole *g* and nut-holders *e f*, substantially as specified.

JOSHUA HUNT.

Witnesses:

WARREN R. PERCE,
W. B. W. HALLETT.