

(No Model.)

J. M. VANCE.

CRANK HANDLE FOR LIFTING JACKS.

No. 287,198.

Patented Oct. 23, 1883.

FIG. 1.

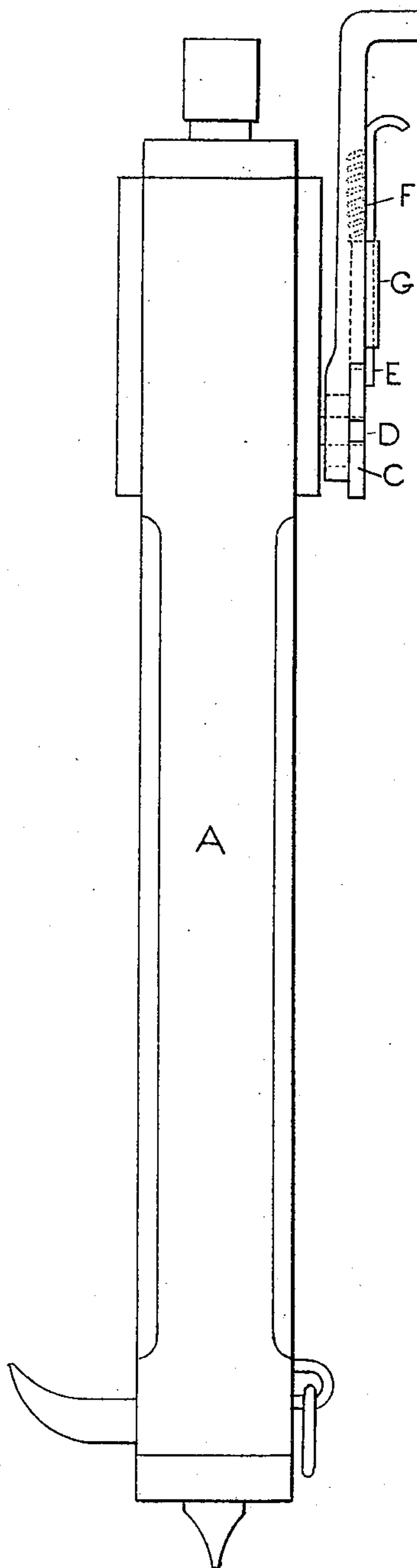


FIG. 2.

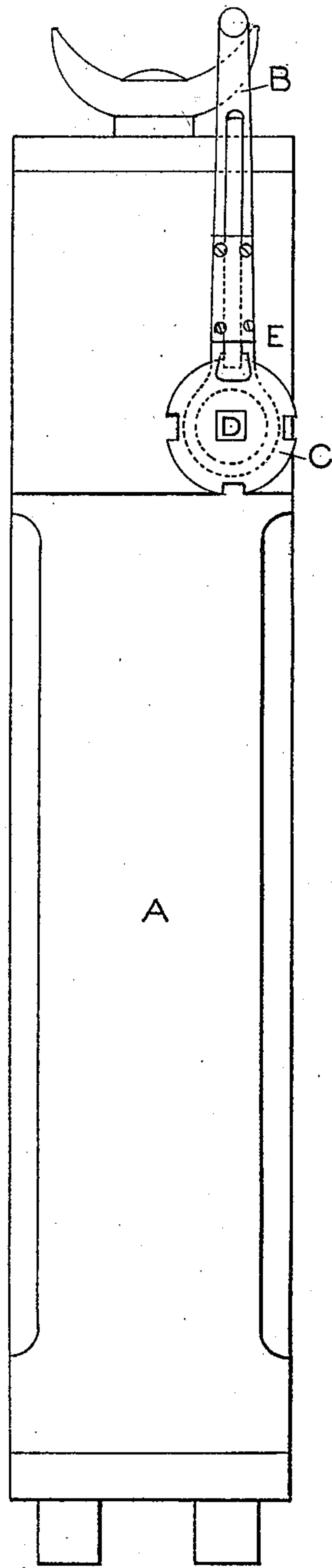
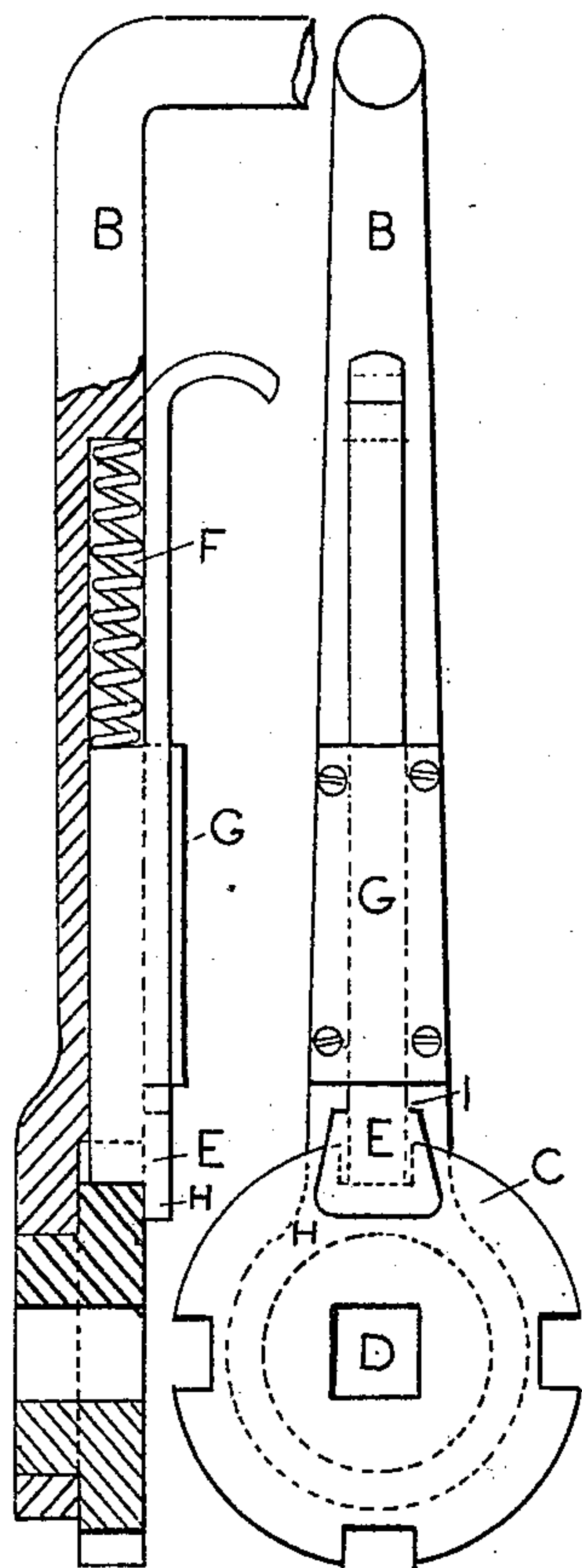


FIG. 3 FIG. 4



WITNESSES

Wm. P. Drum
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JOHN M. VANCE, OF EUREKA, CALIFORNIA.

CRANK-HANDLE FOR LIFTING-JACKS.

SPECIFICATION forming part of Letters Patent No. 287,198, dated October 23, 1883.

Application filed August 21, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. VANCE, a citizen of the United States, residing at Eureka, Humboldt county, State of California, have
5 invented a new and Improved Crank-Handle for Operating Jack-Screws or Lifting-Jacks, of which the following is a specification.

My invention relates to those crank-handles of lifting-jacks which are rotated forward to
10 run out the lifting-bar, and which heretofore have had either to be removed from the winding-stem of the jack entirely when the lifting-bar was retired, or else the handle itself had to be rotated backward, oftentimes very swift-
15 ly when the jack was loaded, at some inconvenience and no little danger to the operator.

My improvement consists in combining with the crank-handle a certain stop or pawl and ratchet-wheel, so that the handle may be freed
20 from the winding-stem of the jack whenever the pawl is released from the ratchet; and again, when the pawl is engaged with the ratchet, the handle will be secured to the stem and be capable of turning it to wind up the
25 jack.

In the accompanying drawings, Figure 1 is a side elevation of a common form of jack, showing my improved handle applied thereto. Fig. 2 is a rear view of the same. Fig. 3 is a
30 sectional elevation of the handle, drawn to a larger scale. Fig. 4 is a front view of the handle.

In all the figures of the drawings like letters of reference represent like parts.

35 A is the jack to which my invention is applied, the details of which it is unnecessary for me to show. B is the crank-handle to which my invention relates. C is a notched or ratchet wheel, which has a square hole through its center to fit the square winding-stem D of the jack.
40 This ratchet-wheel is provided with a hub on the inside, next to the jack, turned off to exactly fit the round eye of the crank-handle. The lever part of the crank-handle is brought
45 forward, so as to overlap and be flush with the face of the ratchet-wheel, and there is a stop or pawl, E, fitted into a recess therein in such a manner as to be freely pushed in and
50 drawn out of the notches of the ratchet-wheel, there being a spiral spring, F, behind this

pawl to force it into the notches when not held back by hand. This stop or pawl is held within the recess by a cap-plate, G, which covers it in part, and is made fast to the crank by
tap-screws, as shown. The outer end of the
55 pawl is hook-shaped, as shown, for convenience of pulling it out of the notches of the ratchet-wheel with the fingers. The other end of this pawl has a flange, H, which overlaps
60 the ratchet-wheel at all times, whether the pawl be drawn out of any of the notches or inserted within one of them, so that by this provision the wheel and crank are securely held together, and the wheel may not slip forward out of the crank-eye. There is a shoulder
65 on the pawl at I, which strikes the cap-plate G just when the pawl is freed from the notches in the wheel, so that it can never be drawn so far back as to allow the flange H to uncover the wheel entirely.
70

The operation is as follows: When the crank
is to be used to wind out the lifting-bar, the
pawl is allowed to engage with one of the
notches in the wheel. When thus engaged,
any motion of the crank will be transmitted
75 to the wheel, and the stem of the jack will be turned to operate on the lifting-bar. When it is desired to run the bar back, instead of removing the crank or allowing it to revolve
backward, the fingers are inserted under the
80 hook part of the pawl, which is pulled back out of engagement with the ratchet-wheel, and the bar is run down while the crank remains stationary.

If on an occasion there is not room enough
85 to take a full swing of the crank, it may be used as a ratchet-lever, making a quarter or half turn at a stroke.

What I claim as my invention, and desire to
secure by Letters Patent, is as follows:
90

The jack-screw crank-handle herein described, consisting of the ratchet-wheel C, fitted to the stem D of the jack, the crank-handle B, fitted to the hub of the said wheel, and the spring-pawl E, arranged together as and
95 for the purpose substantially as set forth.

JOHN M. VANCE.

Witnesses:

JAMES W. HOLT,
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