

P. K. DEDERICK.
Baling-Press.

No. 205,735.

Patented July 9, 1878.

fig. 1.

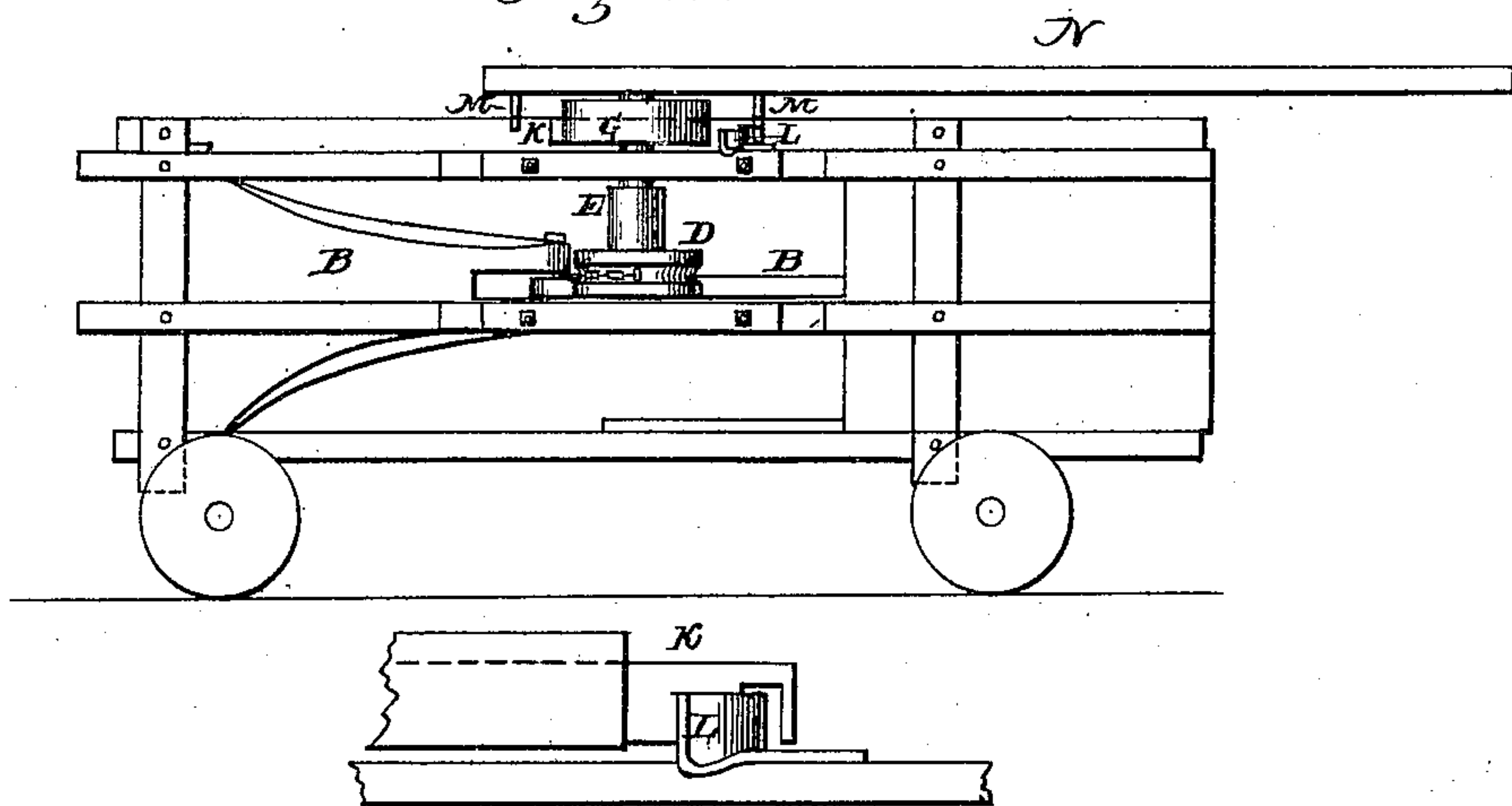


fig. 2.

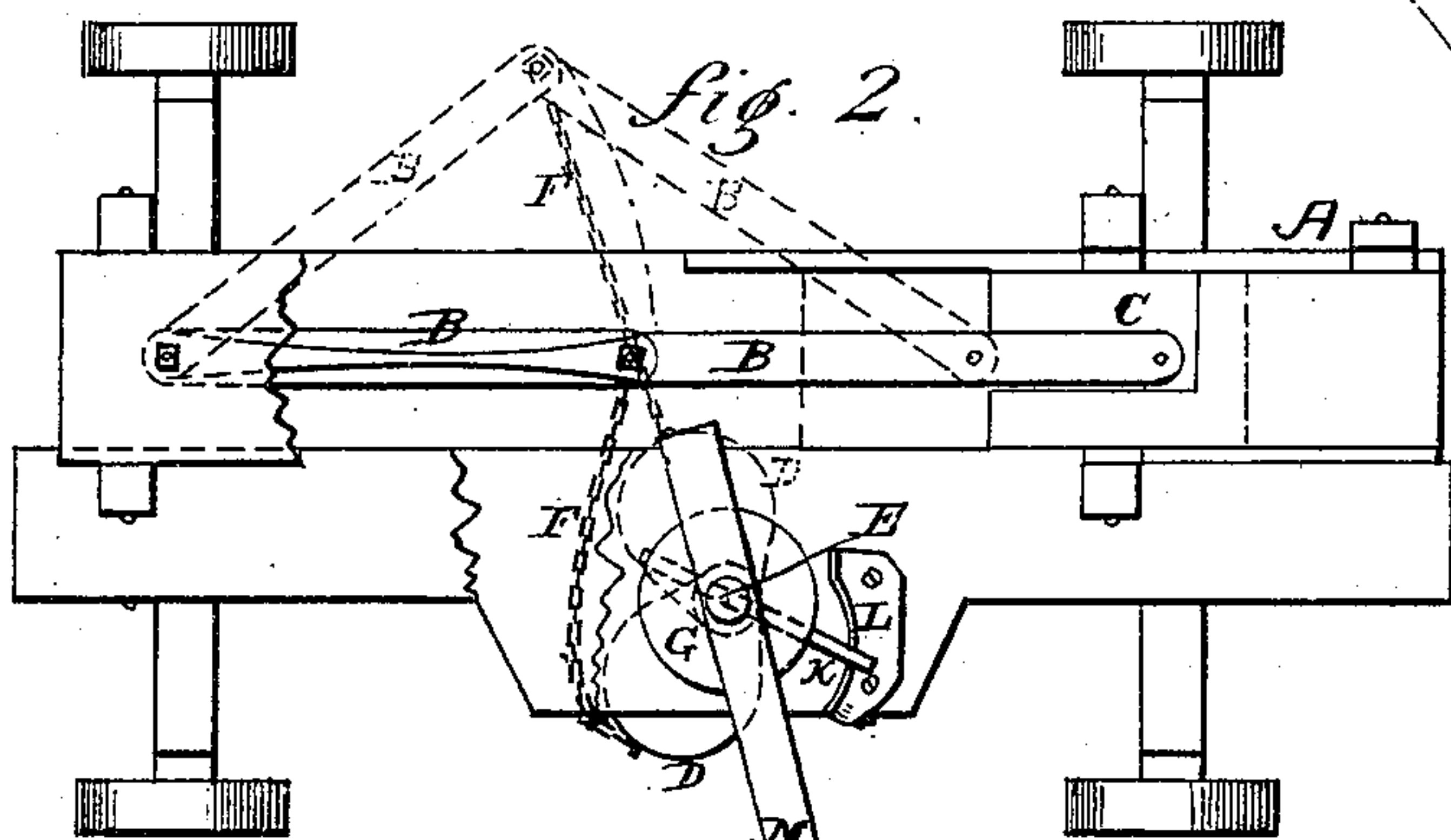


fig. 3.

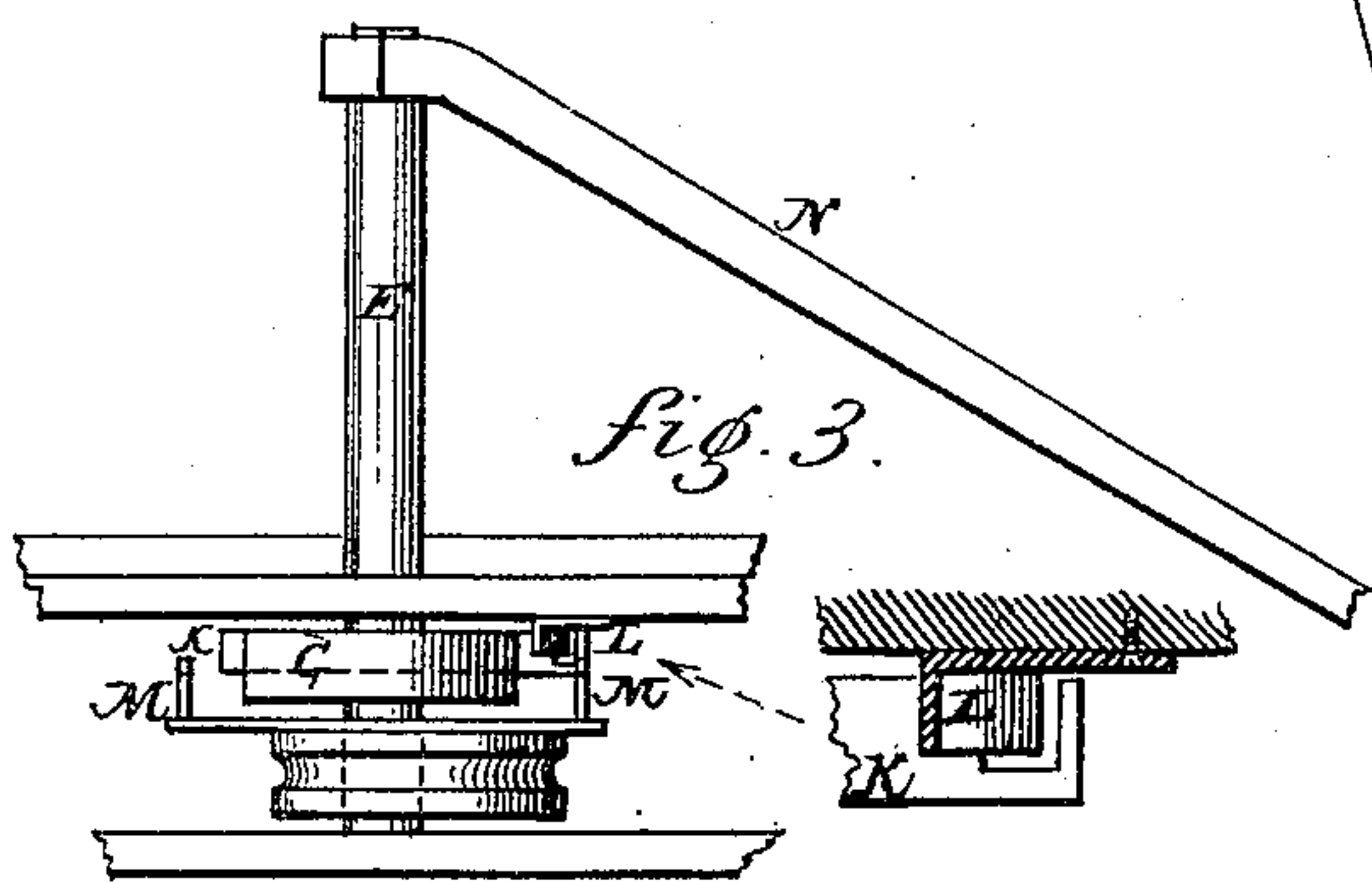
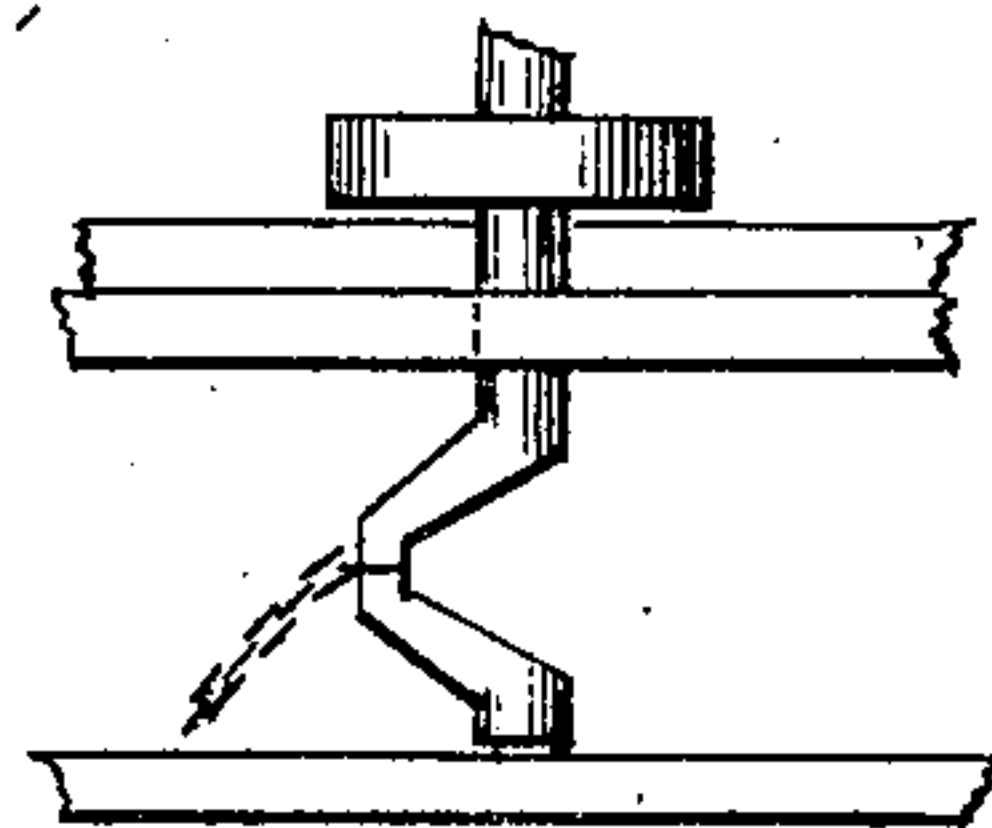


fig. 4.



Attest:

W. H. Blackstock
William Blackstock.

Inventor:

P. K. Dederick

UNITED STATES PATENT OFFICE.

PETER K. DEDERICK, OF ALBANY, NEW YORK.

IMPROVEMENT IN BALING-PRESSES.

Specification forming part of Letters Patent No. **205,735**, dated July 9, 1878; application filed June 11, 1878.

To all whom it may concern:

Be it known that I, PETER K. DEDERICK, of Albany, State of New York, have invented Improvements in Baling-Presses, of which the following is a specification:

My improvements consist in the manner of constructing and operating the power of baling-presses, particularly of that class in which a reciprocating traverser is employed, and for which Letters Patent were granted me October 29, 1872, No. 132,566 and No. 132,639, and the various modifications of the same for which Letters Patent have since been granted me.

Figure 1 represents a side elevation of a baling-press with my improvement attached as applied to a cam. Fig. 2 is a plan view of the same. Fig. 3 is a view of the cam and shaft, illustrating the attachments applied direct to the cam. Fig. 4 illustrates my improvements applied to a crank.

Similar letters represent similar parts.

The frame of the press may be constructed in any suitable manner, or as shown. A is the feed-orifice, being at the side, but may be at the top, if desired. B B is a toggle, the one end secured to the foot of the press and the other to the traverser C.

D is a cam or eccentric located on the shaft E, and connected to the toggle B at or near its joint by the chain F. Any other suitable connection may be substituted for the chain. The shaft E is provided with a suitable wheel or plate, G, at its upper end, which is provided with a movable slide, K, operated by the power through means of the cam L, thus alternately locking and releasing the lugs *m* of the sweep N from the plate, and allowing the cam and the power to be reversed, the horse-lever meantime rotating forward over and around the press. Any suitable movable fastening may be used and applied either to the wheel or lever, so as to alternately lock them together and release them to admit of a reverse movement of the cam or crank.

The baling-chamber may be of any suitable form, or as shown in the Letters Patent referred to; hence unnecessary to describe. The cam-shaft in a working machine should be of iron, and the cam either strongly ironed or constructed wholly of iron.

In operation, the sweep or horse-lever rotates over the entire press, the horse traveling around it in a continuous circuit, and the shaft E is alternately locked and detached from the sweep or horse-lever, with the following result: A batch of hay or other loose material is passed into the press-box through the feed-orifice A and the horse started. The lever, being locked to the shaft, rotates the cam, and through means of the connecting-chain vibrates the toggle B inward, thus forcing the traverser C forward into the press-box and ejecting the charge of material into the bale-chamber of the press. The cam is now detached from the horse-lever, as heretofore stated, and reversed through means of the expansive force of the pressed material; or springs or weights may be employed, or the press set at such inclination that the power will run back freely, thus bringing the connecting devices in position to be operated upon by the horse-lever again. Meantime the horse continues to move onward in the same direction, and the cam is again rotated a half-turn, and another batch of material forced within the chamber, and the operation is thus continued, the cam moving a half-turn and reverse, and the horse-lever rotating continually in one direction and around the press, as set forth.

The cam might be loose on the shaft, with the connecting devices on it, and the plate or wheel located near it, as shown in Fig. 3. The sweep or horse-lever could then be firmly secured to the shaft, and the operation would be same with the same effect. The shaft may also be extended upward, as shown in Fig. 3, and the horse-lever inclined downward, so as to bring the end to which the horse is attached near the ground, while the other end is applied to the shaft at sufficient height, so that the lever in rotating will clear the heads of the men working the press without their dodging it. The operation with a crank would be exactly similar to the cam, using the same connecting devices in order to secure the release and reverse movement of the crank. The crank could also be rotated, if desired, by passing it over the center, which would require but a slight change in the connecting devices, and either crank or cam might be applied directly to or connected to the traverser

in any other manner, so long as the power is reversed and the loose sweep applied and rotated over and around the press, as set forth.

It should be observed that, in all presses heretofore of the class provided with a reciprocating traverser for forcing the material in sections into the bale-chamber, the horse-lever must either be reversed or the power is located at and the circuit of the horse entirely at one side or end of the baling-case, and that in the one case it is awkward and ruinously slow and expensive to reverse the horse, and in the other makes a cumbersome machine, that cannot be moved under ordinary circumstances without taking in pieces, and, in addition, the horse must pass over the connections between the press and power; whereas with my improvements, herein described, the entire machine may be small, compact, and on wheels, and, as the horse travels continually in one direction, there is no loss of time, and the operators are always within the circuit of the

horse; hence can keep it moving and save the expense of a driver.

Having thus fully described my improvements, I claim and desire to secure by Letters Patent—

1. In that class of procumbent baling-presses in which the hay is forced into a bale-chamber by a reciprocating traverser, as set forth, the cam, eccentric, or crank mounted on the frame or case of a baling-press, in combination with the loose or adjustable sweep or horse-lever, constructed so as to be rotated, as set forth.

2. The toggle B, connected to and in combination with the cam, eccentric, or crank and shaft, and loose or adjustable sweep or horse-lever N, rotated as described.

P. K. DEDERICK.

Witnesses:

WM. BLACKSTOCK,
M. CHURCH.