

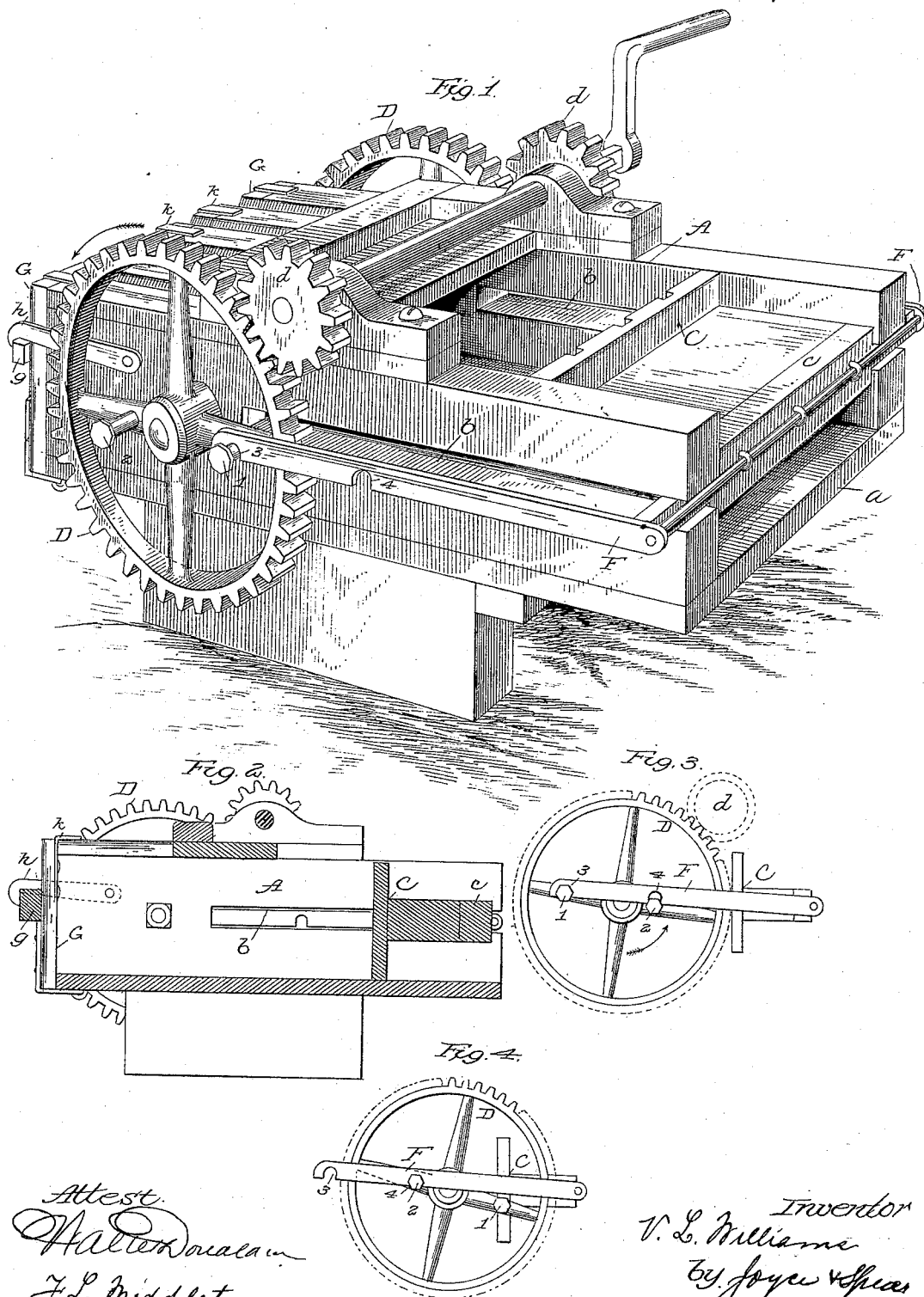
(No Model.)

V. L. WILLIAMS.

BALING PRESS.

No. 306,569.

Patented Oct. 14, 1884.



Attest.
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UNITED STATES PATENT OFFICE.

VIRGIL L. WILLIAMS, OF CARTERSVILLE, GEORGIA.

BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 306,569, dated October 14, 1884.

Application filed June 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, VIRGIL L. WILLIAMS, of Cartersville, in the county of Bartow and State of Georgia, have invented a new and useful Improvement in Baling-Presses; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improvement in baling-presses of that class in which a follower is connected to cogged wheels by means of pitmen and caused to move back and forth by the turning of the wheels.

The object of the invention is to simplify the construction of baling-presses, to facilitate their operation, and especially to cause them to press with greater force toward the end of their action.

In the accompanying drawings I have represented a machine embodying my invention.

In these drawings, Figure 1 represents a perspective view of the press. Fig. 2 is a central vertical longitudinal section. Figs. 3 and 4 represent the wheel, follower, and connecting-bar or pitman in different positions.

In these drawings I have shown a trunk, A, which in general construction does not differ materially from the trunks of ordinary baling-presses. It is adapted to rest upon the side in the position shown; or it may be set upon the end a, if desired. It may be provided with wheels or trucks for convenience in moving it from place to place. The sides of the trunk are slotted, as shown at b, to receive the projecting ends of the cross-head c, which carries the follower C. On each side is a cogged wheel, D, which turns on axles fixed in the sides of the trunk. Motion is imparted to these wheels by means of pinions d, fixed on a shaft which has its bearings in the upper part of the frame. To this shaft power may be applied in any suitable way. On the outer faces of the wheels are set wrist-pins 1 and 2, these pins being on opposite sides of the center of the wheel and at unequal distance therefrom. The outer ends of the cross-heads are connected to the wheel by means of bars F. One end of each bar is pivoted to one end of the cross-head, and the bar is provided with notches 3 and 4, which notches fit over the wrist-pins when the bar is dropped thereon.

The center of the wheels is in line with the slots. When the cogged wheels are turned so as to bring the wrist-pin 1 of each wheel on the side next to the cross-head, the cross-head is pushed backward from the press-box of the trunk, the bars being then arranged as shown in Fig. 1. In order to draw up the cross-head and apply pressure to the material to be baled, the cogged wheels are turned in the direction of the arrow and the wrist-pins 1 draw upon the bars until the wheels reach the position shown in Fig. 3, when the wheels have made a half-revolution. The wrist-pin 2 has at this time entered the notch 4 of the bar, and further revolution of the wheels carries the wrist-pins 1 out of the notch 3, in which they were engaged, and the draft in the remainder of the revolution is on the wrist-pin 2. The wheels continue to revolve in the same direction until a complete or nearly complete revolution is made, when the action ceases. In order that the movement may be more rapid at the beginning of the application of the pressure and the power greater at the close, the wrist-pins 2, which engage with the bars during the last half of the revolution, are set nearer to the center of the wheels than the wrist-pin 1. This increase of force will depend, of course, upon the nearness of the second wrist-pin to the center, and as the wrist-pins in the latter part of their action are approaching the dead-point the power exerted begins to increase to the last.

It will be observed that the whole movement of the follower is equal to twice the distance between the wrist-pins.

For the removal of the bale after it has been pressed, I provide at the end of the trunk a door, G, made up of bars with spaces between them, in the ordinary manner, for an insertion of the wires or bands, the bars being supported upon a cross-beam, g. The gate is hinged upon one side, and is held, when closed, by hooks h.

The cross-bars of the gate are provided with metal projections k, which, when the gate is closed, fit over the upper bars of the trunk and hold their ends down.

I claim as my invention—

1. In a baling-press, and in combination

with its follower, the wheels D, having wrist-pins 1 and 2, and connected bars attached to the cross-head of the follower, and provided with notches for connection with the wrist-pins, substantially as described.

2. In combination with the trunk of the press, the wheels D, and wrist-pins 1 and 2, set therein at unequal distance from the center, the notched connection-bars and the cross-head of the follower, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

VIRGIL L. WILLIAMS.

Witnesses:

THOMAS W. MILNER,
SAML. F. MILAM.