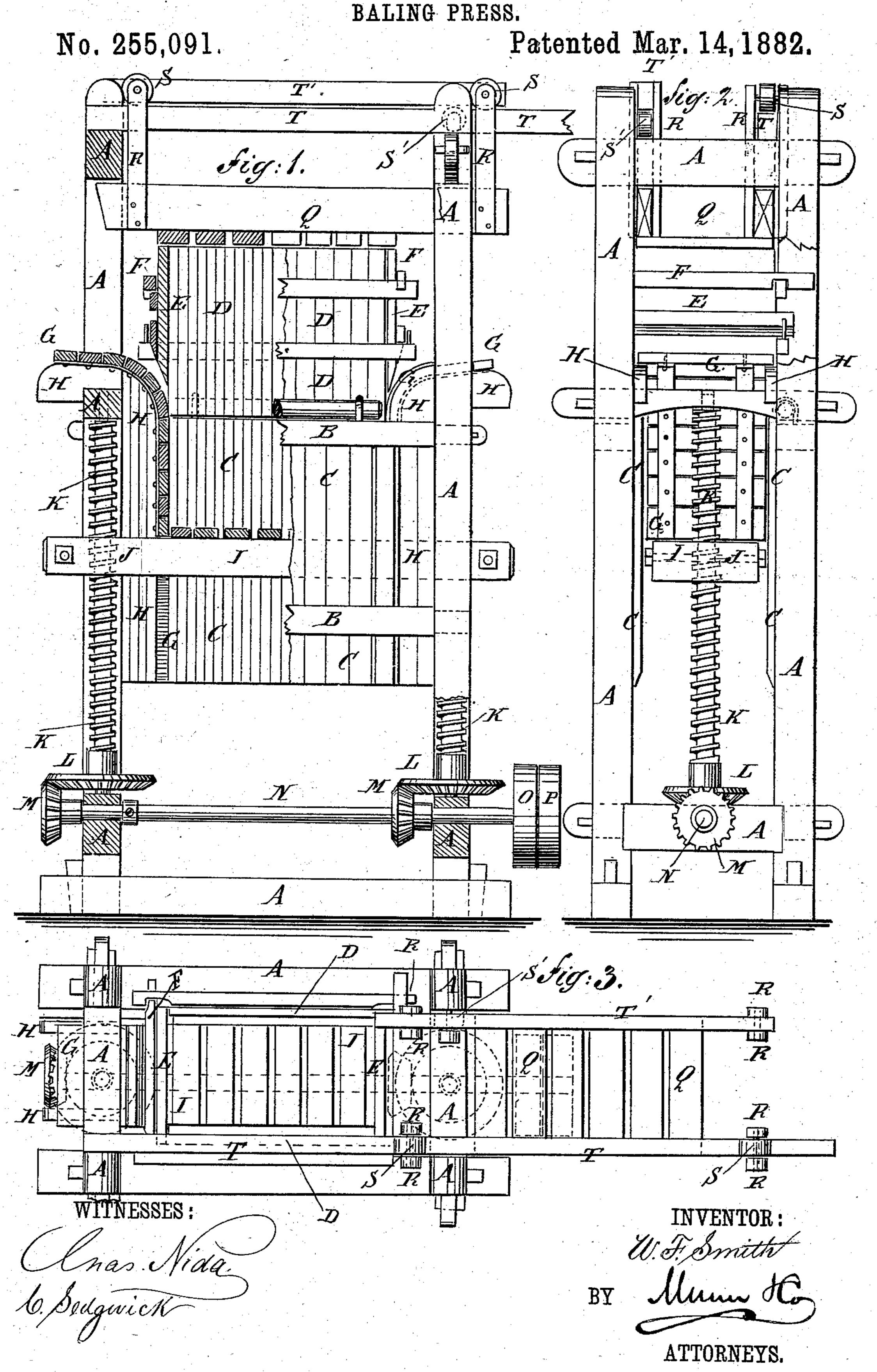
W. F. SMITH.



## United States Patent Office.

WILLIAM F. SMITH, OF OVERTON, TEXAS, ASSIGNOR OF ONE-HALF TO ANDREW J. GILLIAM, OF SAME PLACE.

## BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 255,091, dated March 14, 1882.

Application filed December 29, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. SMITH, of Overton, in the county of Rusk and State of Texas, have invented certain new and useful Improvements in Baling-Presses, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation, partly in section, of my improvement. Fig. 2 is a side elevation of the same, part being broken away. Fig. 3 is a plan view of the same.

The object of this invention is to promote convenience in operating baling presses and increase the efficiency of said presses.

The invention consists in a novel construction and arrangement of parts as hereinafter fully described, and pointed out in the claims.

To the lower ends of the swiveled screws K are attached beveled-gear wheels L, the teeth of which mesh into the teeth of the beveled-

A represents the frame of the press, to the posts of which are attached side bars, B, to support the lower or stationary side part, C, 25 of the baling-box. The upper side parts, D, of the baling-box are hinged at their lower edges to the upper bar, B, to serve as doors and platforms for convenience in removing the bales. The end doors, E, are secured against 30 the end edges of the side doors, D, by hookbars F, which engage with the projecting ends of the side bars of the said doors D. The lower edges of the end doors, E, are beveled upon their outer sides for the passage of the 35 flexible ends G of the lower part, C, of the baling-box. The flexible ends G are formed of narrow cross strips or bars connected at their adjacent edges by leather straps, hinged plates, or links, or other suitable means. The 40 side edges of the flexible ends G slide between the end edges of the sides C and the edges of the guide bars or plates H attached to the frame of the press. At or a little below the beveled lower ends of the end doors, E, the 45 inner edges of the guides H are curved outward, as shown in Fig. 1, so that the said flexible ends G will pass outward as they are

forced upward by the follower I, upon which

the lower ends of the said flexible ends G rest. With this construction the flexible ends G 50 will move upward with the cotton or other material being baled, so that there will be no friction between the said material and the said ends. The ends of the follower I project beyond the baling-box and have screw-holes J 55 formed in them, or in nuts attached to them, to receive the screws K, so that the said follower can be raised and lowered by turning the said screws K in one and the other direction, and so that the said follower can be raised and 60 lowered squarely and without binding. The lower ends of the screws K revolve upon pivots attached to the lowest end bars of the frame A, and their upper ends revolve in bearings attached to the middle end bars of the 65 said frame.

To the lower ends of the swiveled screws K are attached beveled-gear wheels L, the teeth of which mesh into the teeth of the beveled-gear wheels M, attached to the horizontal shaft 70 N. The shaft N revolves in bearings in the lowest end bars of the frame A, and to it is attached a fast pulley, O, and a loose pulley, P, to receive a driving-belt from any convenient power.

Q is the head-block, which is placed beneath the upper end bars of the frame A, so that the said head-block will be firmly supported against the upward pressure.

To the end parts of the head-block Q, at the 80 inner side of one of the top side bars of the frame A, and at the outer side of the other top side bar, are attached pairs of standards R.

To and between the upper ends of the standards R of each pair is pivoted a roller, S, which 85 rolls along a bar, T, attached to the sides of the posts of the frame A, so that the headblock Q can be run out to leave the upper end of the baling box unobstructed to allow the material to be baled to be inserted convenged iently; or the bars can be attached to the standards R, as shown at T', in Figs. 2 and 3, to rest upon rollers S', pivoted to the ends of the posts of the frame A; or the bar T and rollers S can be used at one side of the head-block Q 95 and the bar T' and the roller S' can be used

at the other side of the said head-block. This combined arrangement is preferred, as it leaves one side of the upper end of the baling-box unobstructed, so that the material to be baled 5 can be readily inserted in the baling-box.

Having thus fully described my invention, I claim as new and desire to secure by Letters

Patent—

1. In a baling press, a bale-box having the lower part of its ends made flexible and adapted to be elevated with the follower, substantially as and for the purpose set forth.

2. In a baling-press, the combination, with a bale-box having stationary sides and upper ends, the guide bars or plates H, and the follower I, of the flexible lower ends, G, substantially as and for the purpose set forth.

3. In a baling-press, the combination, with the bale-box C D, having stationary sides and flexible lower ends, and provided with doors E, 20 having beveled lower edges, of the guide bars or plates H and the follower I, substantially as and for the purpose set forth.

4. In a baling-press, the combination, with the frame and the lower part, C, of the baling- 25 press, having flexible ends G, of the guide bars or plates H, attached to the said frame and having their upper ends curved outward, substantially as and for the purpose set forth.

WILLIAM FREDRIC SMITH.

Witnesses:

M. H. RAYFORD, A. J. GILLIAM.