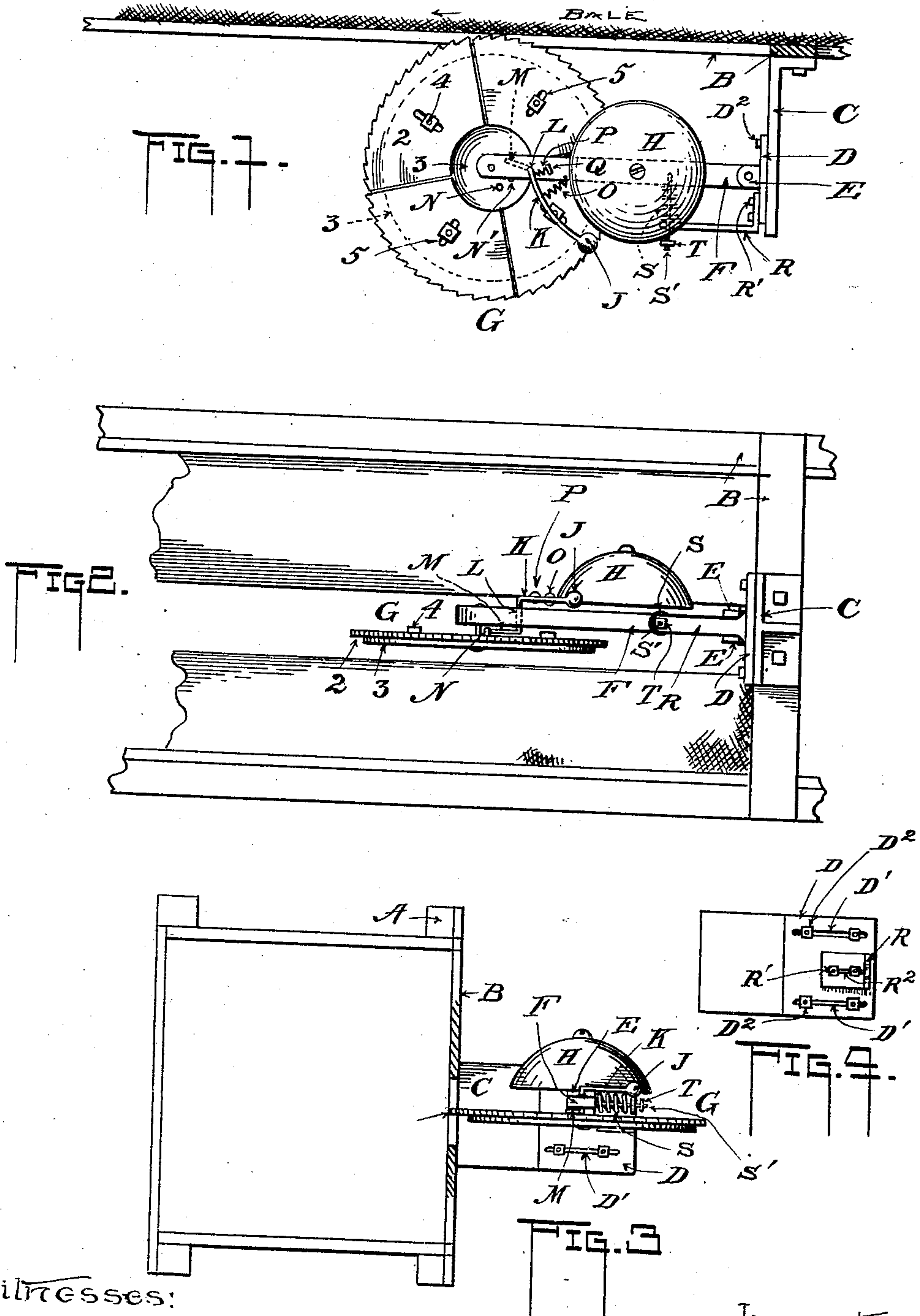


L. B. KIMBLE.
ALARM ATTACHMENT FOR BALING PRESSES.
APPLICATION FILED NOV. 15, 1907.

898,583.

Patented Sept. 15, 1908.



Witnesses:
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UNITED STATES PATENT OFFICE.

LYMAN B. KIMBLE, OF CHILLICOTHE, ILLINOIS.

ALARM ATTACHMENT FOR BALING-PRESSES.

No. 898,583.

Specification of Letters Patent.

Patented Sept. 15, 1908.

Application filed November 15, 1907. Serial No. 402,350.

To all whom it may concern:

Be it known that I, LYMAN B. KIMBLE, citizen of the United States, residing at Chillicothe, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Alarm Attachments for Baling-Presses; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention pertains to an alarm device for baling presses, relating more particularly to an attachment for baling presses for indicating the completion of each bale.

The object of the invention is to provide a simple alarm device which will be thoroughly automatic in its action and positive in its results.

I am aware of several analogous devices but my alarm device is distinguished therefrom by certain details of construction as will be pointed out herein.

In the appended drawing, Figure 1 is a top view of my alarm device as applied to the side of a baling press. Fig. 2 is a side view of the same. Fig. 3 is an end view, and Fig. 4 is a view of certain parts as viewed in Fig. 3.

I have merely indicated enough of the baling press to show the application of my device thereto and in which A and B indicate the framing, the portion B having secured thereto a bracket C extending therefrom at right angles. Secured to the bracket is a casting D having two ears E between which is pivoted one end of an arm F whose opposite end carries a wheel G having a toothed edge as shown, said wheel being carried on the under side of the arm as shown in Fig. 2. Said casting D is adjustable on the bracket C by means of slots D' and suitable bolts D², Fig. 3, whereby it may be adjusted towards or away from the bale. Upon the top of the arm is secured a bell H, Fig. 2, and a clapper therefor at J is carried on a lever-arm K having a right angled pintle L extending down through the arm F, its lower portion having an arm M and lying in the path of movement of a pin N carried by the wheel G described. A spring O connects the lever-arm K with the arm F which normally holds the clapper close to the bell and serves to cause the bell to be struck, while a compression spring P bearing at one end against the arm K and at the other against a lug Q or other suitable member on the arm F serves to provide a

means of partial recoil for the clapper after it has struck so that the tone of the bell will not be deadened. An arm R is secured to the casting D and extends substantially parallel to the pivoted arm F, and a compression spring S is interposed between its free end and said arm F as clearly shown in Fig. 1, there being a pin S' extending through said spring and through the arm R and having at its outer end a nut T to limit its movement, the opposite end of the pin having suitable connection with the arm F. The tendency of the spring S is to force the wheel G against the bale and contrary to devices of which I am aware its pressure is directed upon the arm F at right angles thereto thus insuring a more positive and firm engagement of the said wheel G with said bale. The arm R is adjustable upon the casting D through securing bolts R' and a slot R² in the foot of said arm, as shown in Fig. 4, whereby the spring may be put under more or less compression although other means may be provided to obtain this direct pressure.

In the use of my alarm device, I preferably place it on the side of the machine in order that the wheel G may engage the side of the bale which is one of its smoothest surfaces so that the revolution of the wheel will be more uniform and will not gain or lose as results when using a more uneven surface. In practice the bale as it enters the baling chamber, shown in Fig. 3, engages the wheel G and as it gradually proceeds towards the discharge end of the chamber turns the wheel one full revolution at the end of which the bell is sounded denoting a completed bale. At this time the operator places a dividing block in the chamber for separating that bale from the next one to be formed. The alarm is a notice to the operator, therefore, to insert a dividing block. In this way bales of uniform length can be made.

In addition to the pin N for operating the clapper J there is provided a similar pin N' a short distance in advance of said pin N so that the bell will be sounded twice there being a short interval of time between the first and second alarm in which the operator has ample time to prepare for the insertion of the block at the next or final alarm.

In addition to what has been described in the way of advantages, I construct the wheel N with a plurality of sections 2 carried on a disk 3, there being bolts 4 secured in the disk and extending upward through

slots 5 in each section which radiate from the center of the wheel but instead of carrying the pins N and N' on one of the movable sections they are carried by the disk 3 so
 5 that they are always in the same position relative to the clapper-arm K regardless of the adjustment imparted to the sections. I am aware that this arrangement has been used before although but one pin was
 10 employed. By this means the operator is enabled to make bales of varying lengths, preferably two different lengths, so that either a wire nine feet in length or a wire nine feet and six inches in length may be used.
 15 Evidently the circumference of the wheel may be varied considerably by a very slight radial adjustment of the sections.

Having thus described my invention, I claim:

20 1. An alarm device for baling - presses comprising a pivoted arm, a support therefor, a wheel carried by said arm to engage the bale; a gong and a clapper also carried by the arm, means carried by the wheel for operat-
 25 ing the clapper, a rigid arm extending from the support substantially parallel to the pivoted arm, and a compression spring interposed between the rigid arm and the said pivoted arm and exerting pressure upon the
 30 latter in a direction substantially at right angles to its length.

2. An alarm device for baling - presses comprising a pivoted arm, a support therefor, a wheel carried by said arm to engage
 35 the bale, a gong and a clapper also carried by the arm, means carried by the wheel for operating the clapper, a rigid arm extending from the support substantially parallel to the pivoted arm, a compression spring inter-
 40 posed between the rigid arm and the said

pivoted arm and exerting pressure upon the latter in a direction substantially at right angles to its length, and means for adjusting said spring for the purposes set forth.

3. An alarm device for baling presses 45 comprising an arm pivoted at one end, a support for its pivoted end, a disk carried at the free end of the arm, a series of wheel-sections extensibly carried by the disk and forming a wheel to contact with the bale; a gong and a 50 clapper also carried by the arm, means carried on the disk separate from the sections for operating the clapper, a rigid arm extending from the support substantially parallel to the pivoted arm, and a spring interposed 55 between the rigid arm and the said pivoted arm and extending substantially at right angles to the latter for the purposes described.

4. An alarm device for baling presses com- 60 prising an arm pivoted at one end, a support for its pivoted end, a disk carried at the free end of the arm, a series of sections extensibly carried by the disk and forming a wheel to contact with the bale, a gong and a clapper 65 also carried by the arm, means carried on the disk separate from the sections for operating the clapper, a rigid arm extending from the support substantially parallel to the pivoted arm, a spring interposed between the rigid 70 arm and the said pivoted arm and extending substantially at right angles to the said pivoted arm, and means for adjusting said spring for the purposes set forth.

In testimony whereof I affix my signature, 75 in presence of two witnesses.

LYMAN B. KIMBLE.

Witnesses:

L. M. THURLOW,
 A. KEITHLEY.