

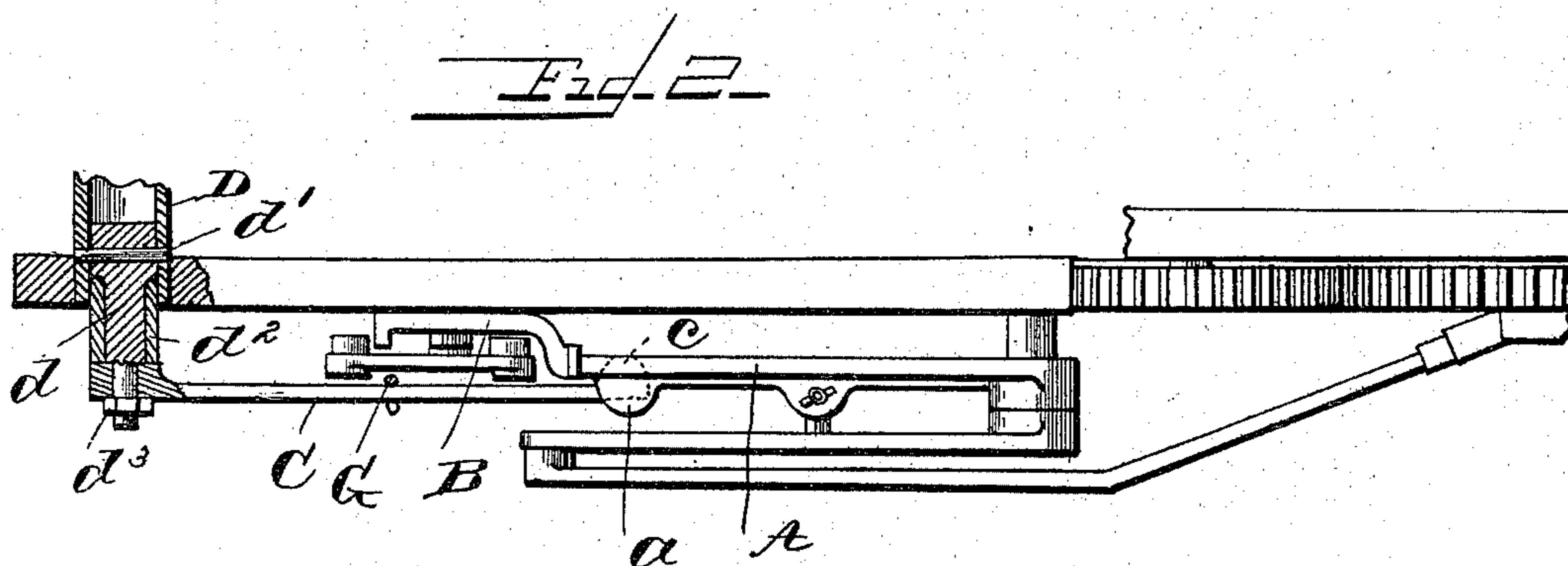
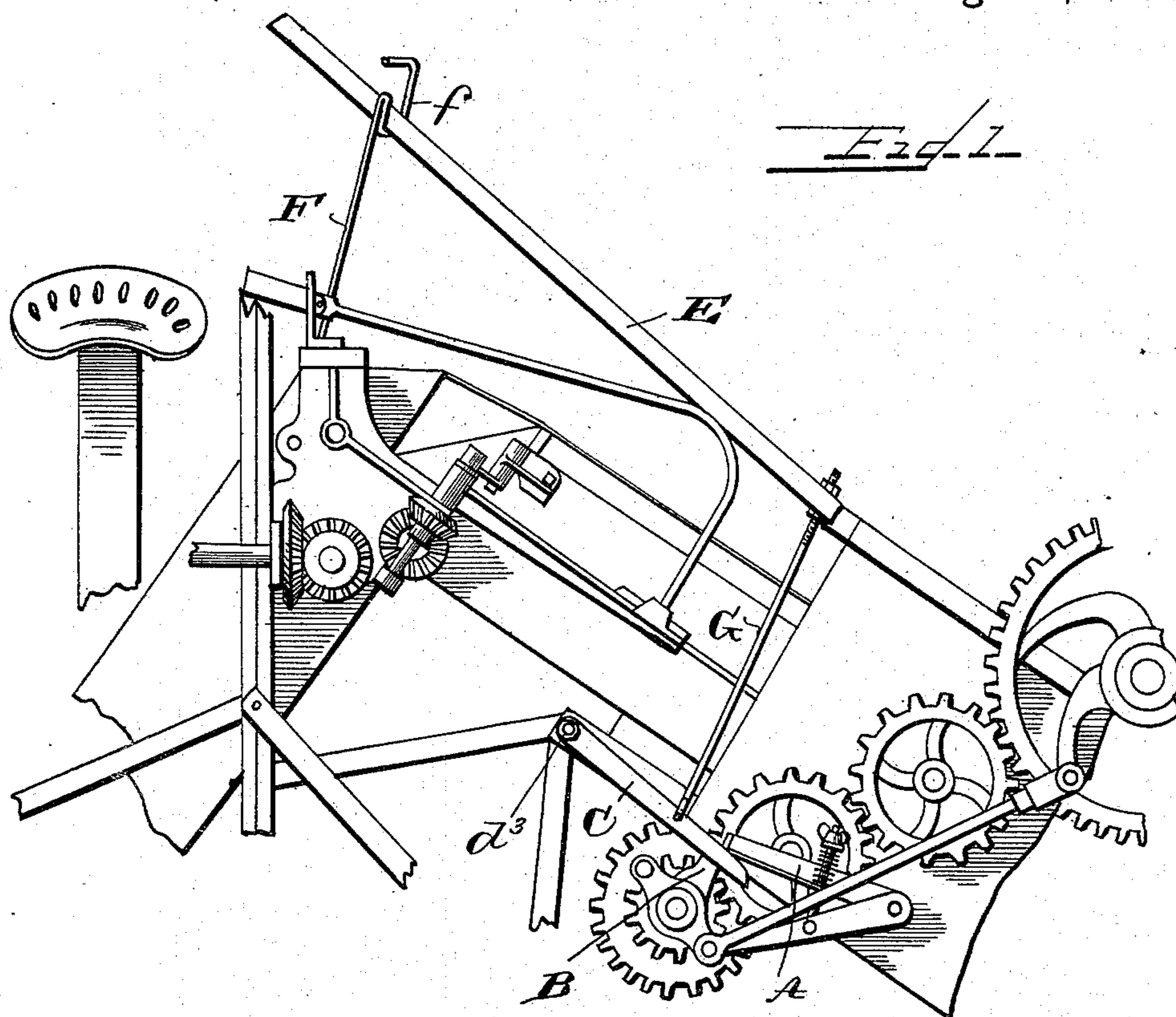
(No Model.)

S. E. WALDURFF.

## RELIEF TRIP LEVER FOR BINDING MACHINES.

No. 565,651.

Patented Aug. 11, 1896.



Witnesses.

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# UNITED STATES PATENT OFFICE.

STANTON E. WALDURFF, OF ROSE, NEW YORK.

## RELIEF TRIP-LEVER FOR BINDING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 565,651, dated August 11, 1896.

Application filed February 17, 1896. Serial No. 579,603. (No model.)

*To all whom it may concern:*

Be it known that I, STANTON E. WALDURFF, a citizen of the United States, residing at Rose, in the county of Wayne and State of New York, have invented certain new and useful Improvements in Relief Trip-Levers for Binding-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention consists in the novel features of construction and combination of parts hereinafter fully described, reference being had to the accompanying drawings, which illustrate one form in which I have contemplated embodying my invention, and said invention is fully disclosed in the following description and claim.

Referring to the said drawings, Figure 1 represents a view of a portion of a grain-binder provided with my improved relief-trip. Fig. 2 is a top plan view of a portion of the mechanism.

The object of my invention is to provide a device capable of being attached to any form or style of grain-binding machine for enabling the driver or operator to move by hand the clutch-dog stop-arm, which sets in motion the binding mechanism. In ordinary grain-binders this trip-lever is moved by a part which is in engagement with the gavel and which is caused to yield when a certain amount of pressure is exerted upon it in forming the bundle.

In carrying out my invention I provide a separate device capable of being attached to any machine, whereby the operator can lift this trip-lever and start the binding mechanism at any time, thus enabling him to control the size of the bundles, which is very desirable in heavy grain or grain which has been matted down by wind and rain.

In the drawings I have shown so much of an ordinary self-binding harvester as is necessary for an understanding of my invention. The binding mechanism is of the usual or "Appleby" type, and A represents the clutch-dog stop-arm and B the clutch-dog, the construction and operation of which are so well known that a description of them is unneces-

sary, it being understood that the lifting of the trip-lever A releases the clutch-dog B and starts the operation of the binding mechanism.

C represents my relief trip-lever, which is preferably pivoted at one end to a part of the frame of the machine. In this instance I have shown it supported in the following manner:

D represents a hollow metal bar which forms a part of the machine. This bar is provided with an eyebolt  $d$  adjacent to its end, which is secured therein by a rivet or cross-bolt  $d'$ , and a piece of tubing  $d^2$  of a size to fit snugly in the end of said hollow bar D is slipped over the eyebolt, said tubing being of such a length as to hold the relief trip-lever C in proper position with respect to clutch-dog stop-arm A. The lever C has a pivotal aperture engaging the eyebolt, as shown, and the parts are secured by a nut  $d^3$ , all of which is clearly shown in Fig. 2.

The relief trip-lever has its free end preferably provided with an inwardly-extending lug or projection  $c$ , which lies normally beneath the clutch-dog stop-arm A. In case, however, the said stop-arm A is provided with an inwardly-extending projection, as shown at  $a$  in Fig. 2, the projection on the relief trip-lever C might be dispensed with, if desired.

E represents a hand-lever supported loosely in a lever support or standard F, secured to the machine and provided at its top with a loop or strap  $f$ , through which lever E loosely passes. One end of lever E is adjacent to the driver's seat and the other end is provided with an adjustable rod G, connected at its lower end with the relief trip-lever. At its upper end this rod is screw-threaded for a considerable distance and is passed through the lever E and provided above and below the same with a nut, as shown, by which a certain amount of adjustment is provided. The object of supporting the lever E loosely in the lever-standard F is to enable the machine to be adjusted for long or short grain without interfering with the operation of the said lever.

The operator by pressing on the lever E can raise the relief clutch-dog stop-arm and thus raise the trip-lever A at any time, thus hav-

ing the binding mechanism entirely under control when desired. When it is not desired to control it, the binding mechanism will be actuated automatically in the usual manner.

5 In attaching my relief trip-lever to other forms of machines than that herein shown I may change the details of its attaching mechanism slightly, as will be obvious, without departing from my invention.

10 I am aware that it has heretofore been proposed to provide a self-binding harvester with mechanism forming parts of the machine structure by means of which the clutch-dog stop-arm could be tripped by the operator,  
15 and this broad idea I do not claim; but I am not aware that it has ever been proposed to make as an article of manufacture a separate device of the construction set forth to be attached to any harvester for accomplishing  
20 this purpose.

What I claim, and desire to secure by Letters Patent, is—

As an article of manufacture an attachment for a binding-machine comprising among its members the relief trip-lever, means for 25 pivotally connecting the same to the frame of the machine, a supporting-standard adapted to be secured to the machine-frame, an operating-lever engaging said standard, and movable longitudinally with respect thereto 30 and a rod adjustably secured to said operating-lever and connected with said relief trip-lever, substantially as described.

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

STANTON E. WALDURFF.

Witnesses:

WM. B. HILL,

SETH C. WOODARD.