(No Model.)

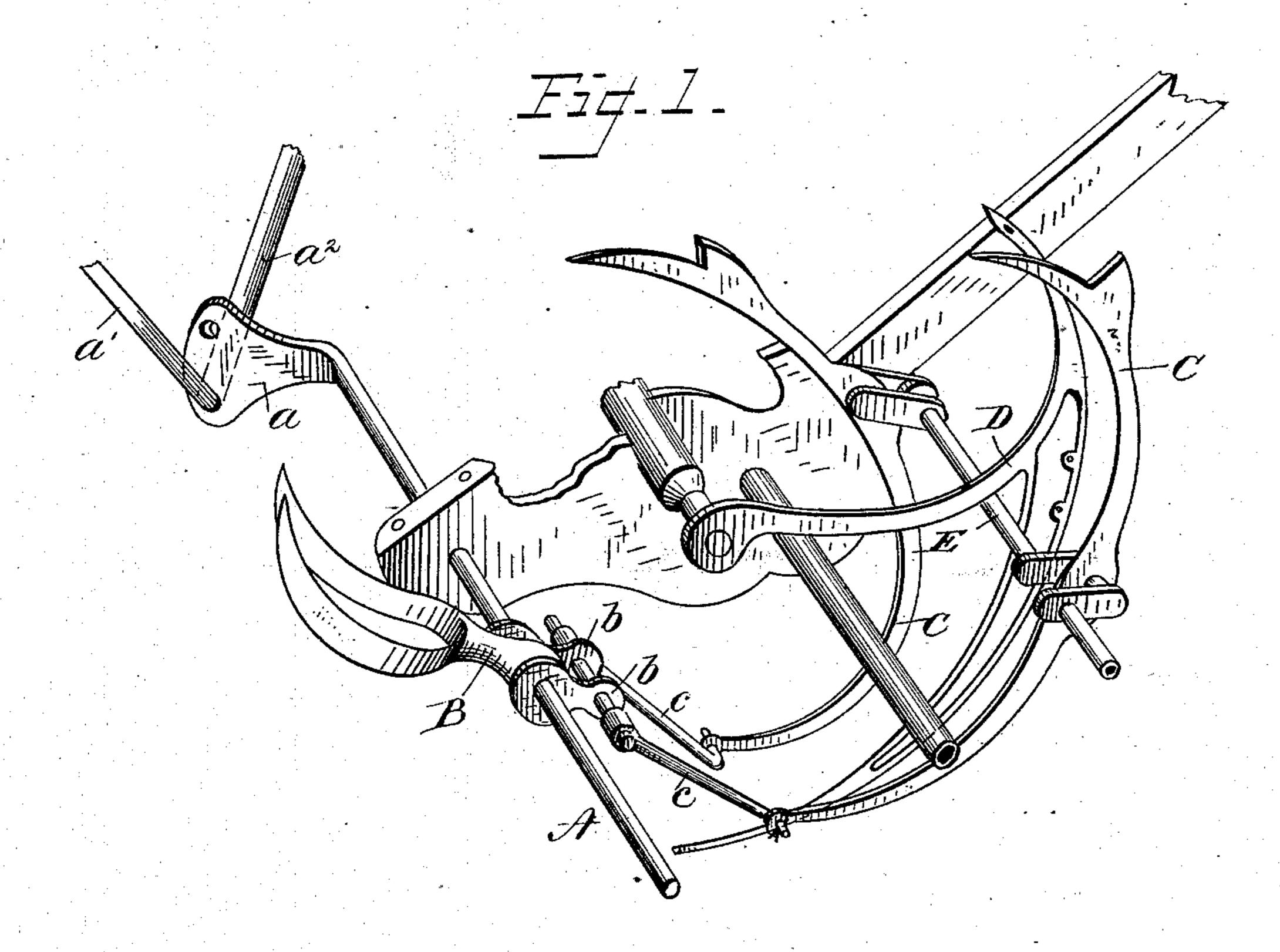
2 Sheets—Sheet 1.

J. P. BULLOCK.

GRAIN BINDER.

No. 274,883.

Patented Mar. 27, 1883.



WITNESSES J. L. Ourand. Joseph P. Bullock

By

Glout & Underwood

Attorneys.

(No Model.)

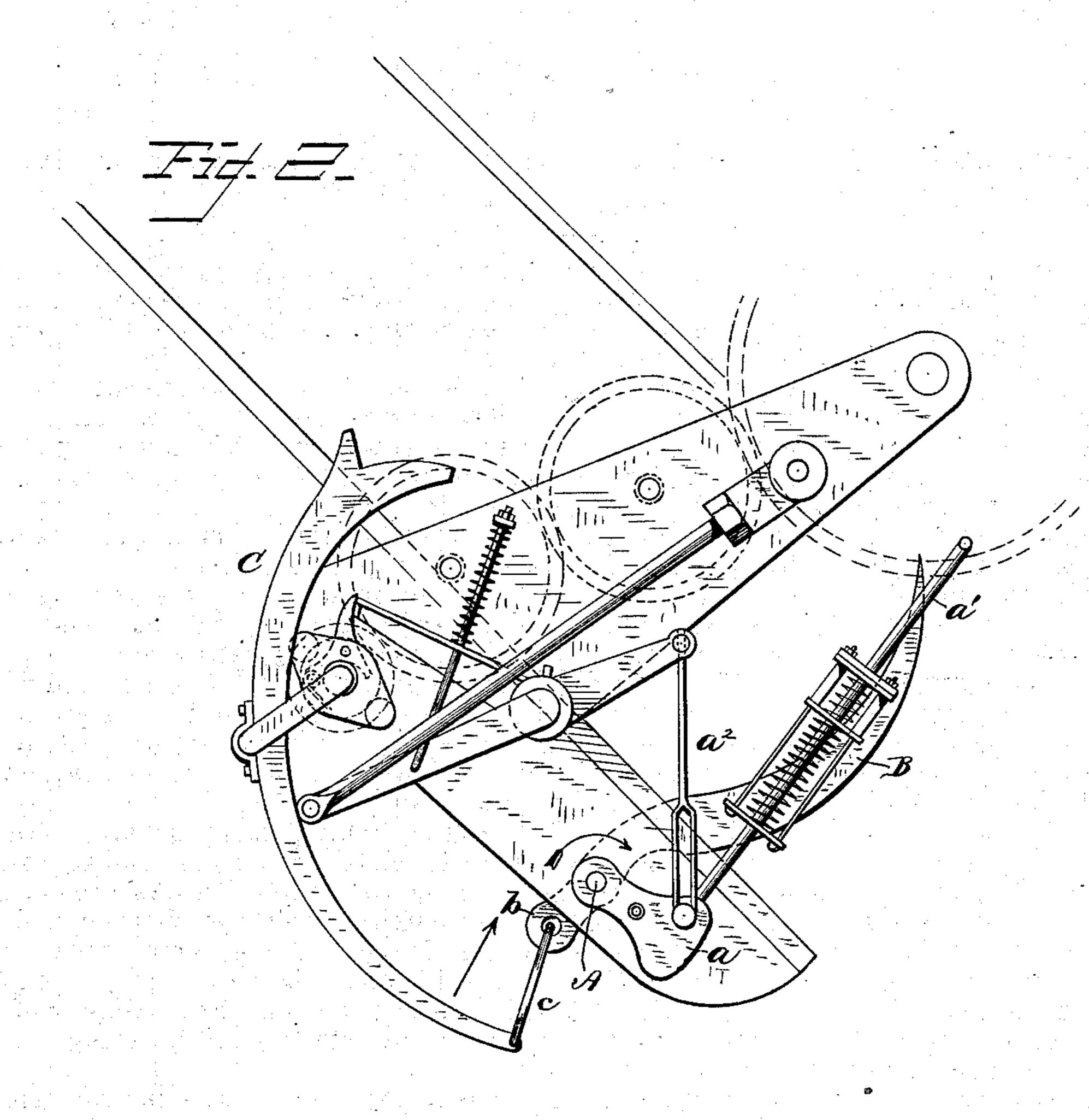
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F. L. Ourand.
Paul Arnold

Mellock by Stout & Coulerwood ATTORNEY

UNITED STATES PATENT OFFICE.

JOSEPH P. BULLOCK, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF TWO-THIRDS TO DENNETT HARVESTING MACHINE COMPANY, (LIMITED,) OF SAME PLACE.

GRAIN-BINDER.

SPECIFICATION forming part of Letters Patent No. 274,883, dated March 27, 1883.

Application filed January 29, 1883. (No model.)

To all whom it may concern:

Be it known that I, Joseph P. Bullock, of Milwaukee, in the county of Milwaukee and in the State of Wisconsin, have invented certain newand useful Improvements in Grain-Binders; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to automatic g ainbinders; and it consists in a device for start-10 ing the binder by pressure of the grain on the packers, as will be fully described hereinafter.

In the drawings, Figure 1 is a perspective view of my invention, and Fig. 2 is a side view.

A is the usual compressor-shaft, and in this instance it is also the tripper-shaft; B, the trip-arm or compressor.

C C are the packers, which are connected to extensions of the compressor B by links c c.

D is the binder-arm.

this arm is connected by a rod, a', to a lever pivoted on the frame and operated by a camgroove in the tyer-wheel, as is usual in this class of binders, while a link, a², is designed to connect the compressor-shaft with the clutch-tripping mechanism of the Appleby binder.

The packers are worked by a crank-shaft, E, and until a bundle of sufficient size has been collected they will work freely without affecting the arm or compressor B; but as soon as a gavel has been collected the resistance it affords will hold back the upper end of one of the packers, and cause its lower end to thrust upward upon one of the links c hard enough to cause it to lift upon the extension of the compressor and turn the crank-shaft outward, and

thus trip the machine, and thus if the cords should catch and not permit the grain to reach the compressor the tripping will still be accomplished.

I have found it most convenient to attach the links to extensions of the compressor; but I may key ears to the shaft A, which will fully answer the purpose of the extensions b b of the compressor.

What I claim as my invention, and desire to

secure by Letters Patent, is-

1. The combination of the rocking compressor-shaft carrying the compressor-arm with the packers, the latter connected with 50 the compressor-shaft by links attached to the heels of the packers, and to ears projecting from the compressor-arms, whereby the resistance of the grain to the packers rocks the compressor-shaft, as set forth.

2. The combination of the rocking compressor-shaft, the clutch-tripping mechanism, and the packers, the compressor-shaft being connected to the clutch-tripping mechanism, and the packers connected to the compressor-shaft, as 6c described, so that the resistance of the grain to the packers shall cause the tripping of the clutch and the starting of the binder, as set forth.

In testimony that I claim the foregoing I 65 have hereunto set my hand, on this 11th day of December, 1882, in the presence of two witnesses.

JOSEPH P. BULLOCK.

Witnesses:

S. S. STOUT, ADOLPH KLEIN.