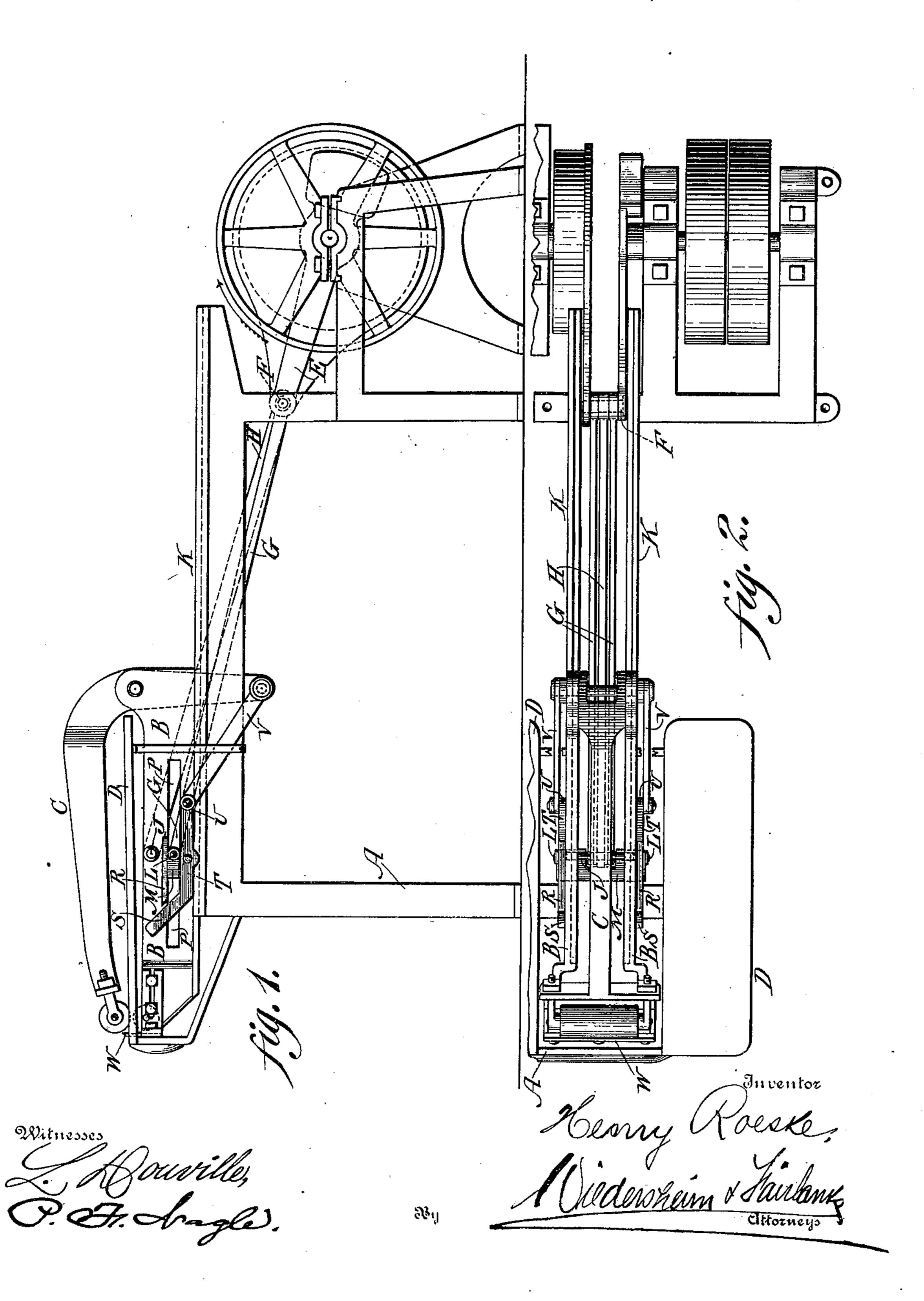
H. ROESKE. LEATHER STAKING MACHINE.

(Application filed Sept. 12, 1900.)

(No Model.)

2 Sheets—Sheet 1.

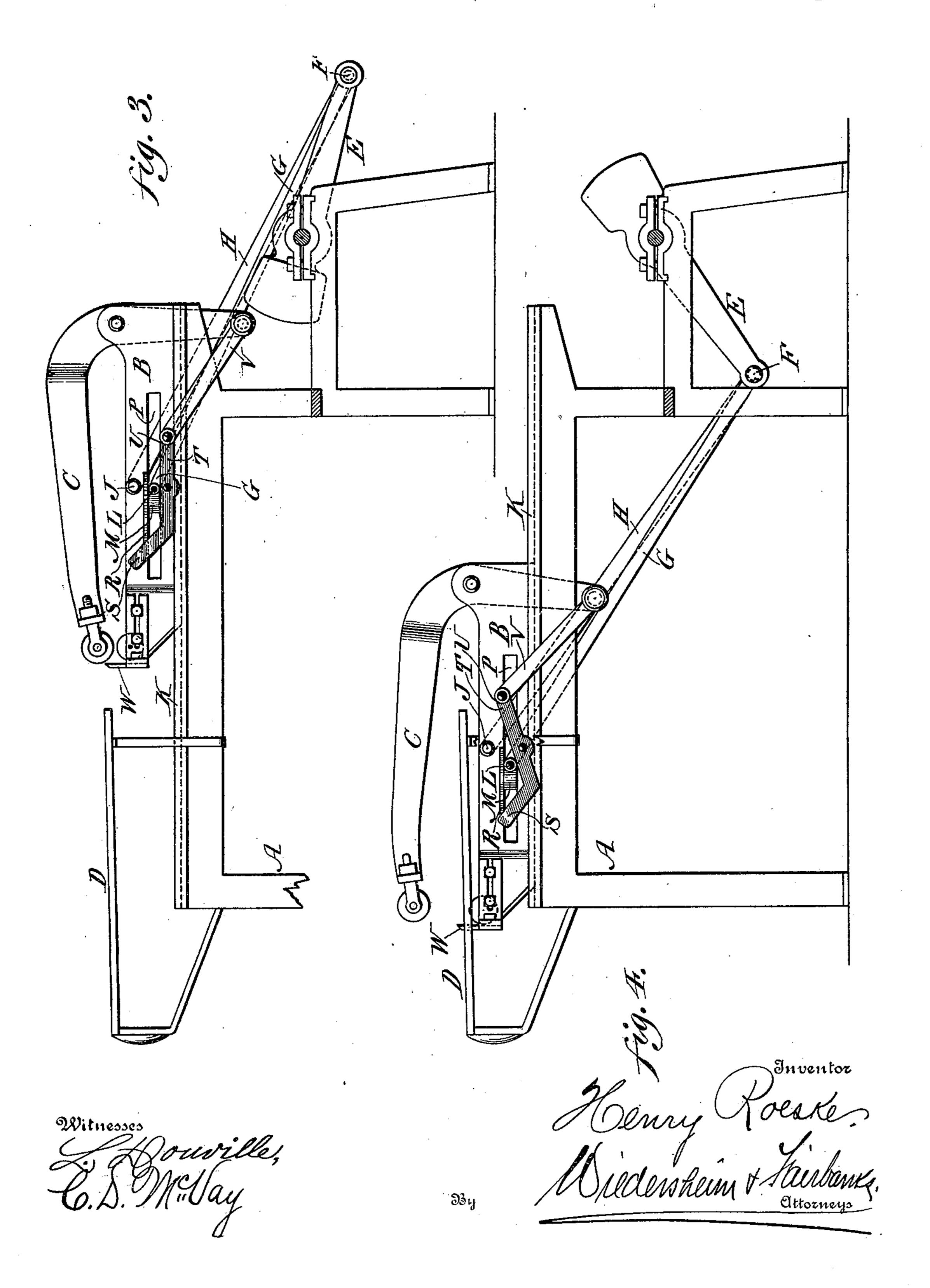


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2 Sheets-Sheet 2.



UNITED STATES PATENT OFFICE.

HENRY ROESKE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO EMANUEL PRINTZ, OF SAME PLACE.

LEATHER-STAKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 665,469, dated January 8, 1901.

Application filed September 12, 1900. Serial No. 29,767. (No model.)

To all whom it may concern:

Be it known that I, HENRY ROESKE, a citizen of the United States, residing in the city and county of Philadelphia, State of Penn-5 sylvania, have invented a new and useful Improvement in Leather-Staking Machines, of which the following is a specification.

My invention consists of an improvement upon the leather staking and perching ma-10 chine for which Letters Patent No. 657,361 were granted September 4, 1900, said improvement consisting of a novel connection between the driving member and the movable arm of the carriage to effect a gradual clos-15 ing of the said arm upon the leather.

The invention further consists of the structural features hereinafter fully described and claimed.

Figure 1 represents a side elevation of a 20 leather staking and perching machine embodying my invention. Fig. 2 represents a top plan thereof. Fig. 3 represents a side elevation showing the parts in the position they assume during the back stroke of the 25 carriage. Fig. 4 represents a side elevation showing the parts in the position they assume when the carriage is advancing with the movable arm raised.

Similar letters of reference indicate corre-30 sponding parts in the figures.

Referring to the drawings, A designates the frame; B, the reciprocating carriage; C, the movable arm, and D the table of the staking-machine. The driving member E, which 35 forms no part of my invention, but which can be either of the well-known forms as shown in Figs. 1 and 2 or as shown in Figs. 3 and 4, is connected by means of a wrist-pin F with two sets of the pitmen G and H. The pitman H 40 is connected with the pivot-pin J of the carriage B and reciprocates said carriage upon the platform K when the driving member E rotates. The pitmen G are connected with the movable arm C of the carriage. The 45 parts above described, with the exception of the particular form of connection between the pitmen G and the movable arm C, are similar to those described in my said Patent No. 657,361. In this machine, as in said pat-50 ented machine, the pitmen G serve to raise and close the movable arm C; but I have in- | the said slide M moves forwardly upon the

terposed in the connection between the driving member and the movable arm C devices for obtaining a lost motion, whereby the closing of the movable arm is gradual. To se- 55 cure this operation, the pitmen G are secured to the pivot-pin L upon a slide M, that is guided in slots P in the carriage. The said slide M is provided at opposite sides with projections R, that are adapted for contact with 60 the end portions S of the levers T, pivoted upon the sides of the carriage B, the other ends U of said levers T being connected with the movable arm by links V.

The levers T are pivoted to the sides of the 65 carriage, so that when the arm C is lowered

or closed an edge of said lever T is parallel with the line of movement of the slide M within its guides P, so that as the said slide M moves through a portion of its stroke it 70 engages said lever T and serves to hold the arm C closed, and at the same time maintains an even and uniform pressure throughout the back stroke. The end portion S of said lever T is inclined upwardly and situated in 75

the path of the projecting portion R of said slide M, so that during a portion of the stroke of the slide this lever T is turned on its pivot

to raise the movable arm. The operation is as follows: In Fig. 1 of 80 the drawings it is considered that the back stroke of the carriage is just about to commence and the movable arm C has just been closed upon the knife W of the carriage. In this position the pivots between the pitman 85 H and the carriage, the pitmen G and the slide, and the pivot of the lever T are in an approximately vertical alinement; but it is understood, of course, that the relative positions of these pivots may be varied as desired. 90 The rear end of the slide M is just a little to the rear of the pivot of the lever T and remains in the rear of said pivot during the back stroke of the carriage, it being understood that the driving member E rotates in 95 the direction shown by the arrow, the said slide M moving in contact with the lever in the rear of its pivot, as shown in Fig. 1, so as to hold the arm C closed and to maintain uniform pressure. As the driving member E con- 100 tinues to revolve and to advance the carriage

carriage to the position shown in Fig. 4, whereby its projecting portion R comes in contact with the inclined end portion Sof the lever just as the rear end portion of said slide passes 5 over the pivot of said lever T. The forward movement of the slide M upon the carriage after its projecting portion R contacts with the inclined portion S of the lever T serves to turn said lever on its pivot to raise the rear 10 end portion U thereof, which through its connection by the link V with said arm C raises the latter, as shown in said Fig. 4. As the driving member E further revolves to the position shown in Fig. 1 the slide M is again re-15 tracted to allow the arm C to close, it being noted that this closing of the arm is gradual and easy, owing to the fact that it is controlled by the inclined portion S of the lever T, which effectually prevents said arm C from 20 quickly closing.

It will be seen from the foregoing that except for the connection between the driving member E and the movable arm this machine is similar to the said patented machine and that said connection between the driving member E and the movable arm contains mechanism for opening and closing said arm by which the lost motion is secured, as above described, for insuring the gradual closing of said movable arm and for maintaining uniform pressure throughout the back stroke.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

25 1. In a machine of the kind specified, a carriage provided with a movable arm, and a driving member independently connected with said carriage and with said arm for actuating the same, the connection between said driving member and arm embracing a plurality of members connected with and movable relatively to said carriage and movable upon the carriage independently and interdependently during portions of their movement.

2. In a machine of the kind specified, a carriage provided with a movable arm, and a driving member independently connected with said carriage and with said arm for actuating the same, the connection between said member and arm consisting of independent links, one of which is connected with said member and the other with said carriage, said links being movable upon said carriage independently and interdependently.

3. In a machine of the kind specified, a carriage provided with a movable arm, and a driving member connected with said carriage and with said arm, the connection between 60 said driving member and arm consisting of independent links, one of which is connected with the arm and the other with the driving member, one of said links having a sliding connection with said carriage, and the other 65 of said links being connected with a lever mounted upon said carriage and situated in the path of said first-mentioned link to be

moved thereby when the latter slides on the carriage.

4. In a machine of the kind specified, a 7° carriage provided with a movable arm, and a driving member connected with said carriage and with said arm, the connection between said driving member and arm consisting of independent links, one of which is connected 75 with the arm and the other with the driving member, one of said links having a sliding connection with the carriage, and the other of said links being connected with one end of a lever mounted upon the carriage, the 80 other end of said lever being situated in the path of said first-mentioned link to be moved thereby when the latter slides on the carriage.

5. In a machine of the kind specified, a carriage provided with a movable arm, and a 85 driving member connected with said carriage and with said arm, the connection between said driving member and arm consisting of independent links, one of which is connected with the arm and the other with the driving onember, one of said links having a sliding connection with the carriage, and the other of said links being connected with one end of a lever mounted upon the carriage, the other end of said lever being inclined and situated in the path of said first-mentioned link to be moved thereby when the latter slides on the carriage.

6. In a machine of the kind specified, a carriage provided with a movable arm, and a 100 driving member connected with said carriage and with said arm, the connection between said driving member and arm consisting of independent links connected with said parts, one of said links being connected with a slide 105 mounted upon the carriage, and the other of said links being connected with a lever mounted upon the carriage and situated in the path of said slide.

7. In a machine of the kind specified, a 110 carriage provided with a movable arm, and a driving member connected with said carriage and with said arm, the connection between said driving member and arm consisting of independent links connected with said parts, one of said links being connected with a slide mounted upon the carriage, and the other of said links being connected with a lever mounted upon the carriage, said lever being adapted to be moved by said slide and said slide 120 and lever being movable independently and interdependently.

8. In a machine of the kind specified, a carriage provided with a movable arm, and a driving member connected with said carriage 125 and with said arm, the connection between said driving member and arm consisting of a link connected with the driving member and with a slide upon said carriage, a lever mounted upon said carriage and in contact with 130 which said slide moves, and a link connected with said lever and with said arm.

9. In a machine of the kind specified, a carriage, provided with a movable arm, and a

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driving member connected with said carriage and with said arm, the connection between said driving member and arm consisting of a link connected with the driving member and with a slide movable in guides upon said carriage, a lever mounted upon said carriage and having an inclined end portion situated in the path of said slide, said slide being

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adapted to move in contact with another portion of said lever when not in engagement 10 with said inclined end portion, and a link connected with said lever and with said arm.

HENRY ROESKE.

Witnesses:

JOHN A. WIEDERSHEIM, HARRY COBB KENNEDY.