

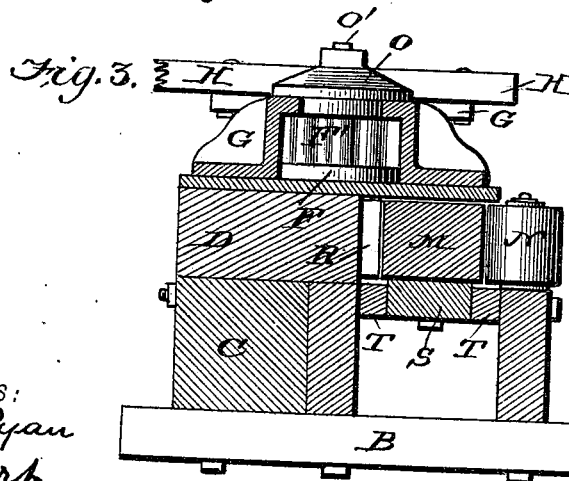
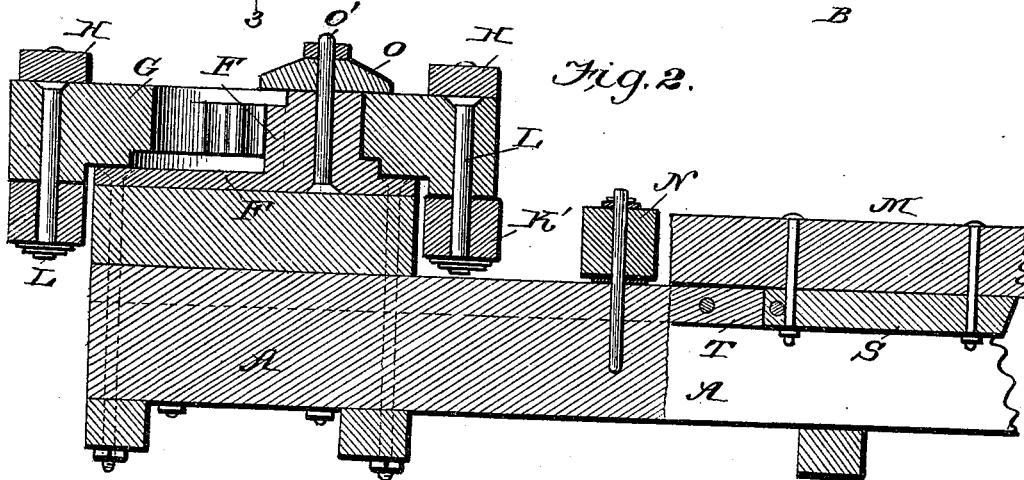
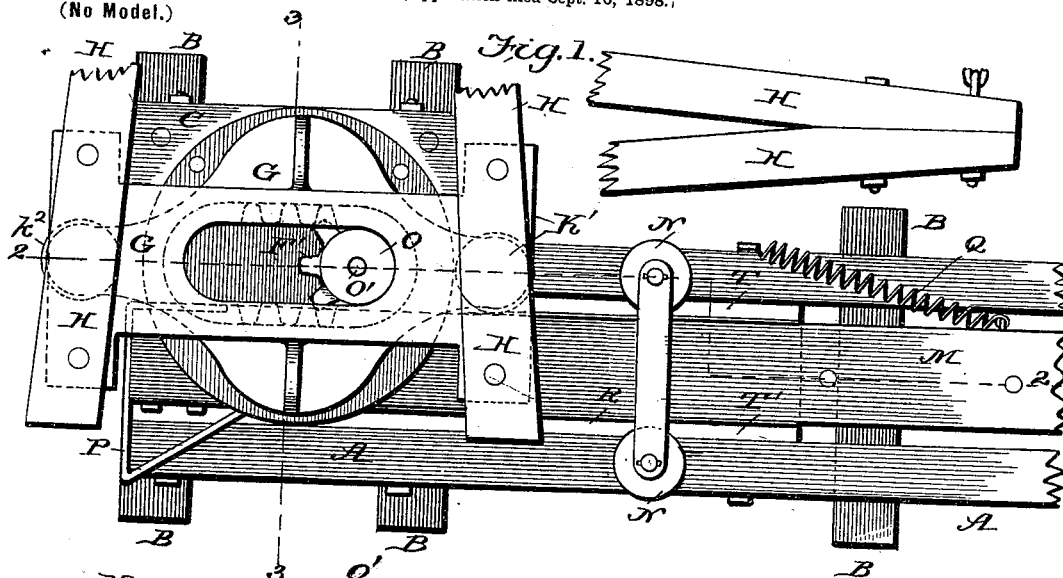
No. 645,855.

Patented Mar. 20, 1900.

C. F. KOHLRUSS.  
HAY PRESS HORSE POWER.

(Application filed Sept. 16, 1898.)

(No Model.)



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

CHRISTIAN FREDERICK KOHLRUSS, OF AUGUSTA, GEORGIA.

## HAY-PRESS HORSE-POWER.

SPECIFICATION forming part of Letters Patent No. 645,855, dated March 20, 1900.

Application filed September 16, 1898. Serial No. 691,122. (No model.)

*To all whom it may concern:*

Be it known that I, CHRISTIAN FREDERICK KOHLRUSS, a citizen of the United States, residing at Augusta, in the county of Richmond and State of Georgia, have invented a new and useful horizontal rotary (so-called "full-circle") horse-power for a hay-press or any other object to which it may be applied, of which the following is a specification.

My invention relates to improvements in horizontal rotary horse-powers in which a horizontally-moving pitman is operated by a horizontal rotary horse-power giving two full actions to the pitman at every revolution; and the objects of my improvements are, first, to provide a continuous circle move for the horse; second, to increase and compound the power as the resistance against the pitman increases, and, third, to move the pitman in a horizontal and entire straight line. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top view of the machine as it appears after the removal of the top or hold-down plate. Fig. 2 is a vertical section of the machine on the line 2 2, Fig. 1; and Fig. 3 is a vertical section on line 3 3, Fig. 1. Fig. 4 is a top view of the end of the lever at which the horse is to pull.

Similar letters refer to similar parts throughout the several views.

The sills A, cross-pieces B, and blocks C and D constitute the foundation or base for the power and also connection with the press-chamber.

On base D is fastened with bolts E the plate F, with cog center post F', on and around which slides (when operated) the cog-plate G, having levers H attached thereto to be operated by a horse or horses hitched to link I, Fig. 4, and moving from right to left turn plate G, with pins L, to which rollers K' and K<sup>2</sup> are attached, and move the pitman M, guided by rollers N, horizontal on slide-plate or base part T and straight into the press or chamber. The top or hold-down plate O, fastened with left-hand screw-bolt O', is to hold plate G steady and keep it from moving up when in motion. The cogs on center post F' are on one side only of the same and are adapted to engage and operate in the cogs (indicated with dotted lines) on plate G, which will produce somewhat of an eccentric movement. It will be seen that the cogs or teeth of plate G are arranged on opposite sides of

the slot, and hence the two sets of cogs engage the teeth on pivot-post F alternately as the plate and levers are turned.

Letter P stands for an iron or steel shoe fastened to pitman M, on which rollers K' and K<sup>2</sup> run out and in as the plate G turns around post F', which will move the pitman straight before it until plate G gets in the same position as Fig. 1 shows after having made a half-turn around post F, at which time the roller K' releases the pitman M, which is automatically brought back to its starting-point by a spring Q, after which operation roller K<sup>2</sup> will do the same as roller K'. For the return of the pitman by spring Q to its exact starting-point I have provided a stop-block S, attached to the under side of the pitman and stopped by base part T, on which the pitman slides. The base part T and pitman M are lined with wrought-iron slides R to decrease friction and keep pitman M from wearing.

What I claim as my invention, and desire sired to secure by Letters Patent, is—

1. In a horizontal rotary horse-power for presses, the combination with the stationary center post having teeth on one side, of the rotatable lever having the plate G secured thereto and provided with a slot that receives said center post, said slot being provided with teeth on opposite sides and the pitman coacting with the levers as shown and described.

2. In a horizontal rotary horse-power for presses, the combination with the block D and center post fixed thereon and having teeth on one side, of the levers H, the plate G having a slot provided with teeth on opposite sides as specified and adapted to rotate around said post, the rollers K' and K<sup>2</sup> held pendent from said plate, and the pitman and retracting-spring, as shown and described.

3. In a horizontal rotary horse-power for presses, the combination with the block D and center post fixed thereon and having teeth on one side, of the levers H, the plate G having a slot provided with teeth on opposite sides as specified and adapted to rotate around said post, the rollers K' and K<sup>2</sup> held pendent from said plate, the pitman and retracting-spring, a guide for said pitman, and a stop for arresting its retractile movement, as shown and described.

CHRISTIAN FREDERICK KOHLRUSS.

Witnesses:

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