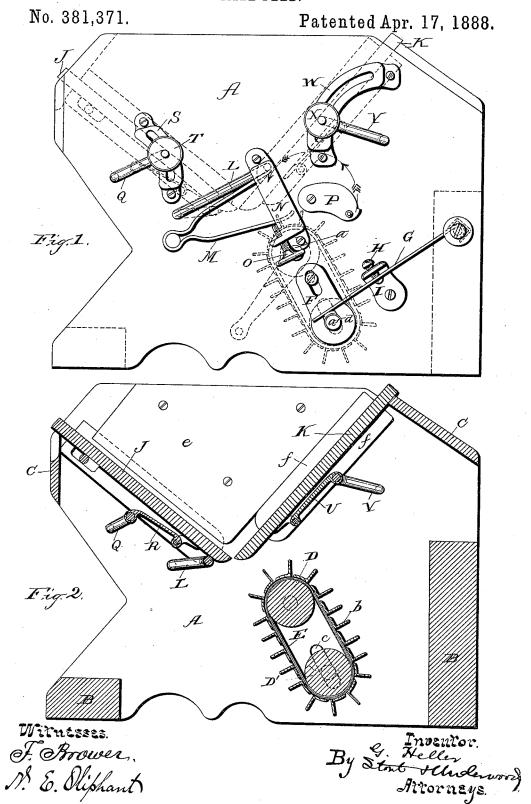
## G. HELLER.

MILL FEED.



## UNITED STATES PATENT OFFICE.

## GOTTLIEB HELLER, OF DILLON, KANSAS.

## MILL-FEED.

SPECIFICATION forming part of Letters Patent No. 381,371, dated April 17, 1888.

Application filed May 2, 1887. Serial No. 236,883. (No model.)

To all whom it may concern:

Be it known that I, GOTTLIEB HELLER, of Dillon, in the county of Dickinson, and in the State of Kansas, have invented certain new 5 and useful Improvements in Mill-Feeds; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to mill-feeds; and it consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings, and subsequently claimed.

In the drawings, Figure 1 represents a side elevation of my mill-feed, and Fig. 2 a vertical langitudinal methods.

15 cal longitudinal section of the same.

Referring by letter to the drawings, the frame of my device is composed of side boards,

A A, said boards being braced apart by staypieces B B and C C, as best illustrated in

In the side boards, A A, are bearings for the journals a a' of pulleys D D', around which travels an endless apron or carrier, E, that is preferably provided with a series of projecting plates, b, each of these plates having a flange by which it is secured to the apron, and in order to take up any slack that may occur in said apron I make the lower pulley, D', adjustable by having the bearings for its journals a' elongated, as shown at c, Fig. 2, and these journals are secured in boxes d, projecting from sliding pieces F upon the outside of

said side-boards.

The free ends of pivoted springs G bear 35 upon the boxes d on the sliding pieces F, and the tension of these springs is regulated by set-screws H, having their bearings in stationary brackets I.

ary brackets I.

The inner sides of the boards A A are provided with guides e for a pivotal sliding feedboard, J, and ways f for a cut-off, K.

The lower end of the feed-board J rests upon a crank, L, that has its outer end re-

tained in position upon a spring, M, by means of a keeper, N, the tension of the spring being regulated by means of a set-screw, O, having a bearing in said keeper.

ing a bearing in said keeper.

The pressure on the feed-board J will cause the crank L to overcome the resistance of the spring, and thus the feed opening is automatically adjusted in proportion to the weight of the material on its way to the apron E, by which it is carried to the mill.

In case it is desirable to have a fixed adjustment of the feed-board J, I provide a pivoted latch, P, arranged to be brought up under the upper end of the spring M, whereby the latter and the crank L are held in a fixed position, said board being then adjusted in or out by means of a crank, Q, connected thereto 60 by a strap, R. The outer end of the crank Q works in a slotted bracket, S, and is provided with a set-nut, T.

The cut off K is connected by a strap, U, with a crank, V, the outer end of which works 65 in a slotted bracket, W, and is provided with a set nut, X.

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

In a mill-feed, the combination of the frame, a pivotal sliding feed-board, a crank arranged to bear against the lower end of said board, a spring that in turn impinges against the crank, a pivoted latch for the spring and crank, and 75 means, substantially as described, for securing the feed-board in an adjusted position, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Dillon, in the 80 county of Dickinson and State of Kansas, in the presence of two witnesses.

GOTTLIEB HELLER.

Witnesses:

George Heller, C. A. Shultz.