Z. THOMAN.

Cider-Mills.

No. 198,226. Patented Dec. 18, 1877.

Fig 1.

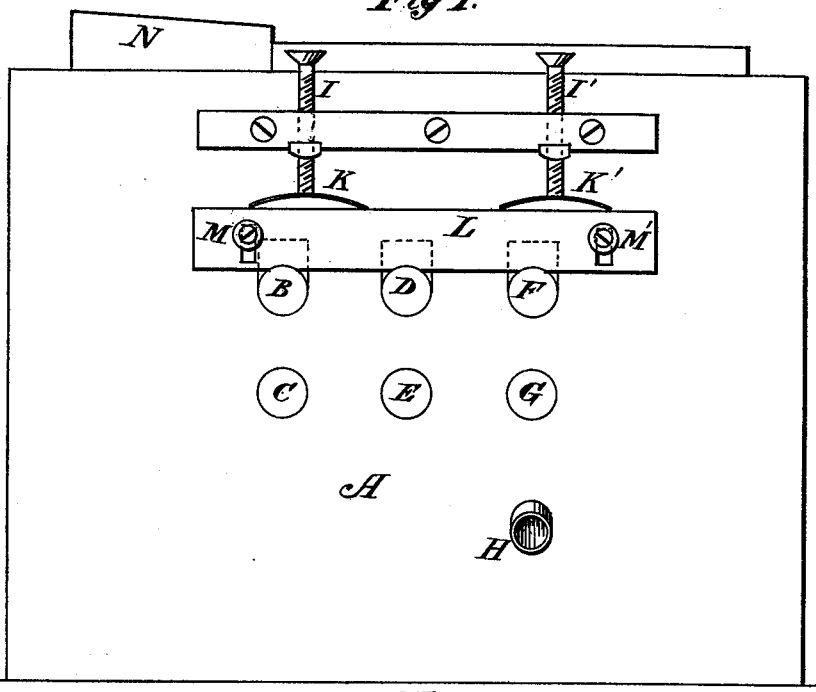
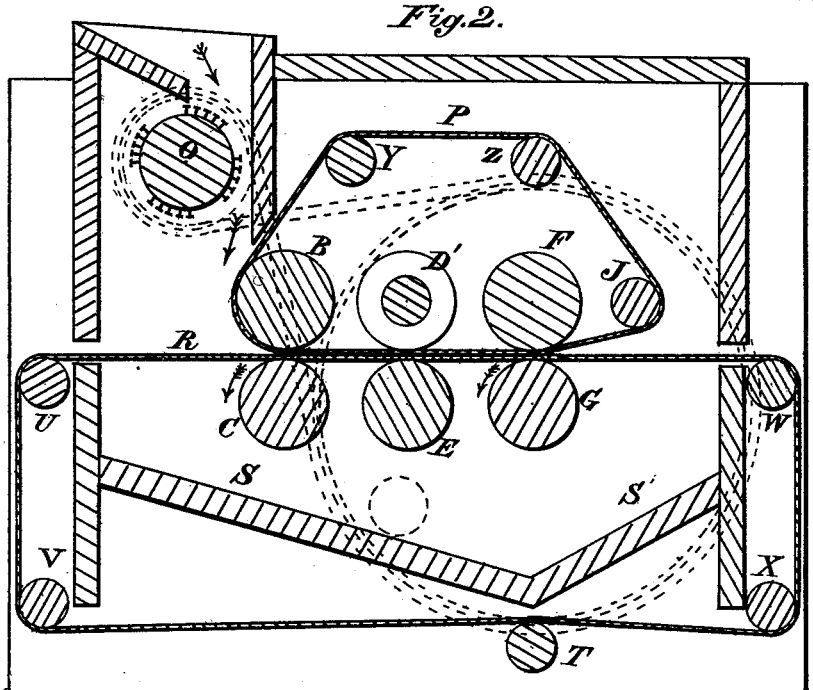


Fig. 2.



Attest:
F. H. Schott
A. Watson.

Inventor:
Zacharias Thoman
By Daniel Breed
Atty.

UNITED STATES PATENT OFFICE.

ZACHARIAS THOMAN, OF GLENVILLE, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS HIS RIGHT TO LEONARD KOPP AND EPHRAIM DUBS.

IMPROVEMENT IN CIDER-MILLS.

Specification forming part of Letters Patent No. **198,226**, dated December 18, 1877; application filed April 3, 1877.

To all whom it may concern:

Be it known that I, ZACHARIAS THOMAN, of Glenville, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Cider-Mills; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

In the accompanying drawings, Figure 1 is a side view of my improved cider-mill. Fig. 2 is a vertical section of the same.

My invention consists of a novel arrangement and combination of two endless aprons and two sets of pressing-rollers, and other devices, all of which will be fully understood by the following description.

In the accompanying drawings, Fig. 1, A represents one side of the box-frame, with the axles of the rollers B C D E F G having bearings therein. The piece L bears upon the upper side of the axles of the upper rollers, and is adjustable by means of slots working on the bolts M M′ and the set-screws I I′, having elliptic springs K K′, Fig. 1. The upper apron P travels upon the two upper pressing-rollers B and F and the three rollers J Y Z. The roller D has a short rim to direct the apron P, but is not a pressing-roller. The lower apron, R, travels on and is directed mainly by the four rollers U V W X, and it also rests upon the rollers C E G.

The operation of my mill is as follows: The apples, being fed into the hopper N, are ground by the spiked wheel O, when the pomace falls upon the apron R, and is carried between the two pressing-rollers B and C. The cider flows down upon the directing-board S, and to the discharge-spout H, Fig. 1. The rollers F and G give the pomace a second pressure, the cider flowing down, as before, upon the directing-board S, (indicated by curved arrows near the rollers C and G.) A roller, T, Fig. 2, serves to support the lower flap of the apron R. The pomace is discharged from the apron R near the rollers W and X at the back part of the machine.

Any suitable gearing may be employed to move the roller O, and also the pressing-rollers and endless aprons; therefore I need not describe the gearing in detail; but I have represented in dotted lines, Fig. 2, a band-wheel and band thereon, working on a pulley carried by the axle of the roller O.

I do not broadly claim the use of endless aprons, combined with rollers, for pressing and carrying pomace in cider-mills, but limit my claim to the above-described construction and arrangement of cider-mills.

Having described my invention, I claim—

In a cider-mill, the combination and arrangement, substantially as shown and described, of the toothed cylinder or roller O, belt P, embracing the rollers B F Y Z J, and guiding-roller D D′, and belt R, embracing the rollers U V W X, and pressed by the tightening-roller T, as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ZACHARIAS THOMAN.

Witnesses:

DANIEL BREED,

LEONARD KOPP.