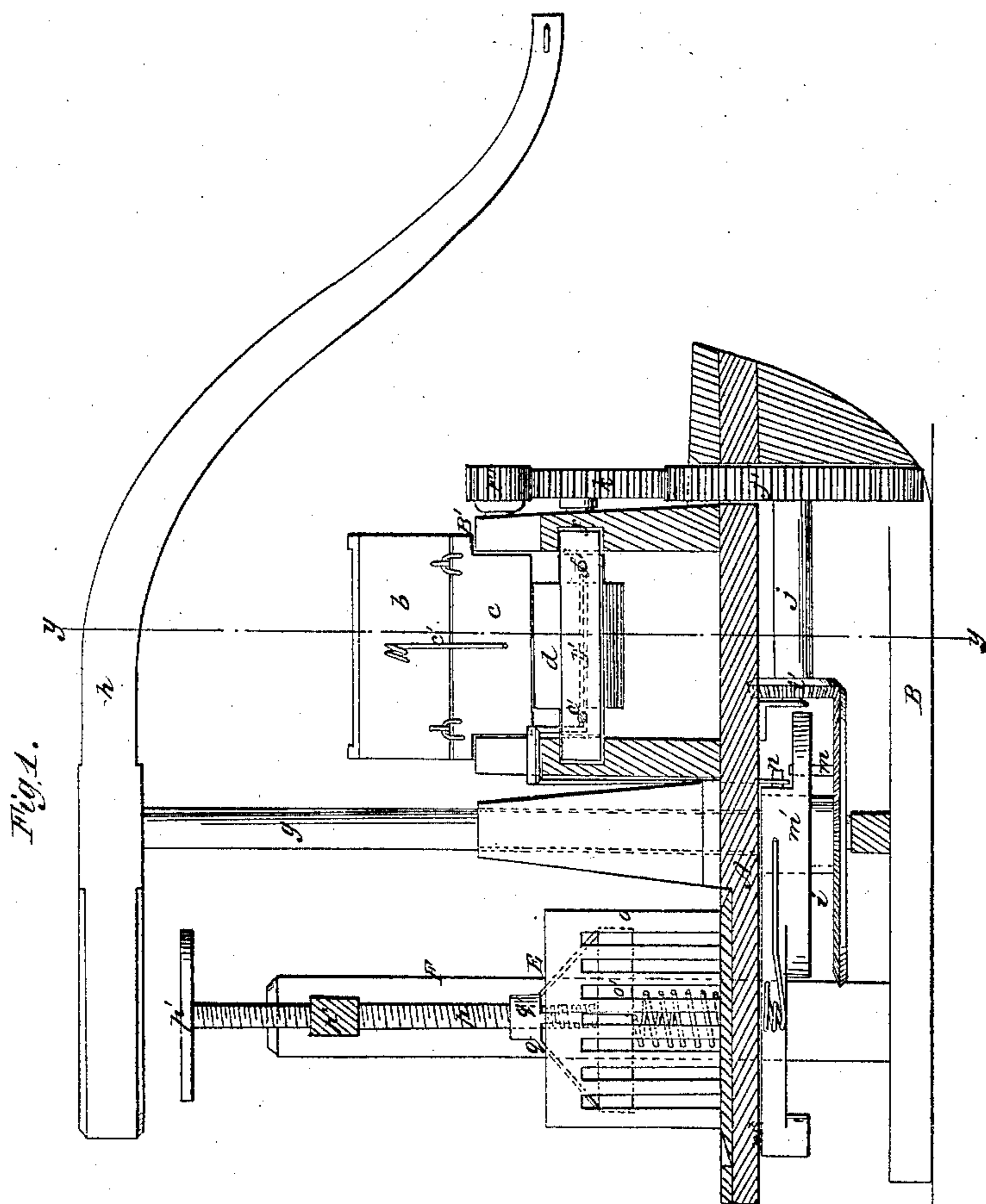
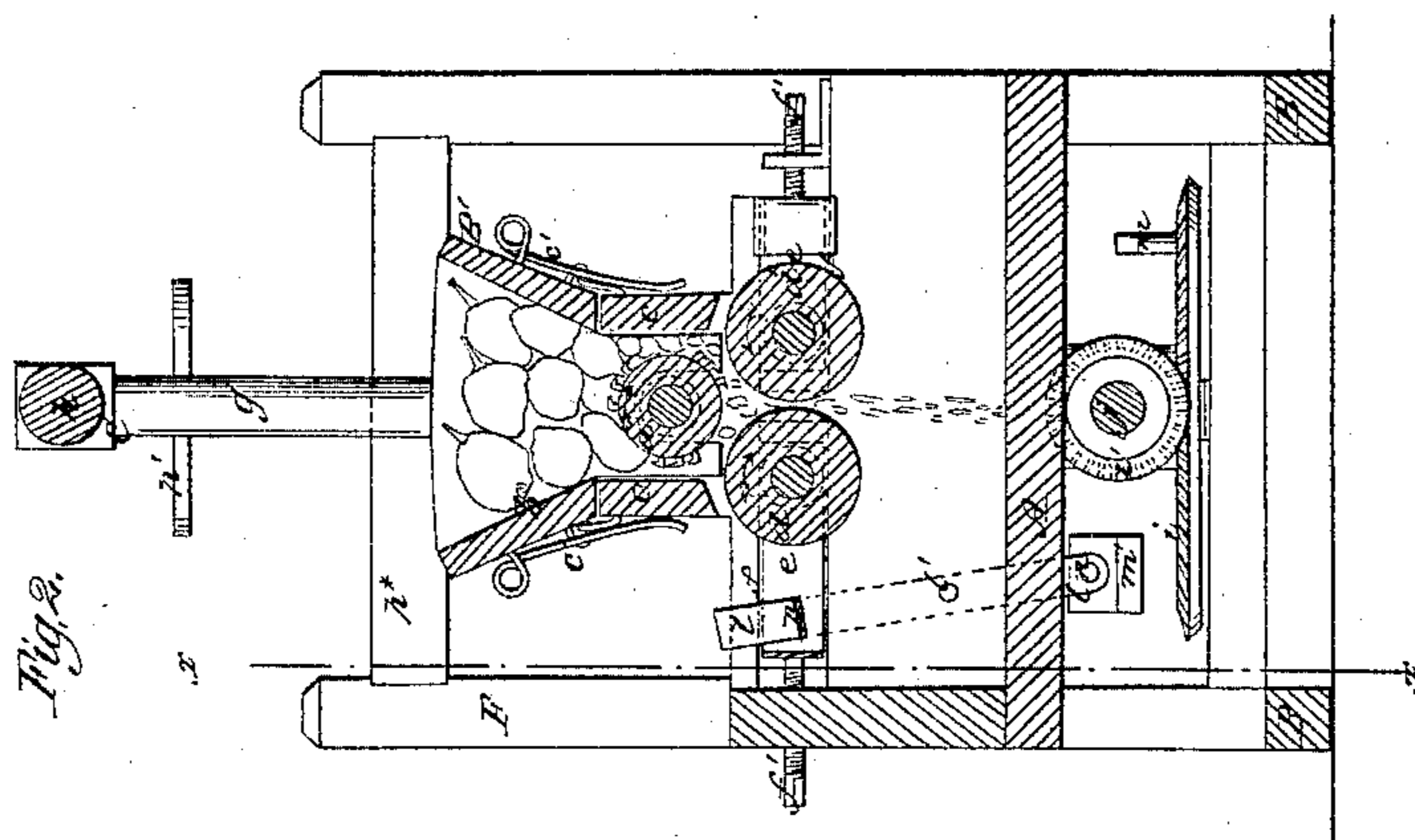


P. J. Berlin,
Cider Mill.

N^o 37,147.

Patented Dec. 16, 1862.



UNITED STATES PATENT OFFICE.

P. J. BERLIN, OF BLAIRSVILLE, PENNSYLVANIA.

IMPROVEMENT IN CIDER-MILLS.

Specification forming part of Letters Patent No. 37,147, dated December 16, 1862.

To all whom it may concern:

Be it known that I, P. J. BERLIN, of Blairsville, in the county of Indiana and State of Pennsylvania, have invented a new and Improved Portable Cider-Mill; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a longitudinal vertical section of my invention, taken the plane indicated by the line *xx*, Fig. 2. Fig. 2 is a transverse vertical section of the same, the plane of section being indicated by the line *yy*, Fig. 1.

Similar letters of reference in both views indicate corresponding parts.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation with reference to the drawings.

A represents a platform, constructed of wood or any other suitable material of sufficient strength to support the crushing and the pressing apparatus, and also the horse-power which serves to impart motion to the crushing apparatus. This platform is supported by sleigh-runners B, so that the whole mill can be readily carried from place to place.

The crushing apparatus B' consists of a spiked roller, *a*, operating at the bottom of the hopper *b* between two flaps, *c*, which are forced toward the surface of said spiked roller by means of suitable springs, *c'*. By the action of this roller and the spring-flaps the apples or other fruit are cut up, and thence the cuttings pass through between the crushing-rollers *d d'*. These rollers have their bearings in boxes *e*, which slide toward and from each other in guide-grooves *f*, and which are adjusted by means of set-screws *f'*. Motion is imparted to the rollers *a* and *d d'* by means of a horse-power, C, which consists of a vertical shaft, *g*, bearing on its top end the sweep *h* and on its bottom end the master-wheel *i*. This wheel gears into pinion *i'* on the horizontal shaft *j*, and a gear-wheel, *j'*, on this shaft imparts motion to the crushing-rollers *d d'* by means of the gear-wheel *k*, and to the spiked roller *a* by the pinion *k'*. The crushing-roller *d* is cleaned or scraped off at certain intervals

by means of a scraper, D, which is attached to a lever, *l*, which has its fulcrum on a pivot, *l'*, and to which an oscillating motion is imparted by means of a wiper, *m*, which projects from the master-wheel *i*, and which comes in contact with the spring-lever *m'* once for each revolution of the master-wheel. The spring-lever *m'* oscillates on a pivot, *m**, at the under side of the platform A, and it connects by a pin, *n*, with the oscillating lever *l*, which carries the scraper D. Whenever the wiper *m* comes in contact with the spring-lever *m'*, the scraper is forced up against the surface of the roller *d*, and all the pomace adhering to it is scraped off. If desired, a similar scraper may be applied to the roller *d'*. By the action of the self-acting scraper or scrapers the rollers *d d'* are kept clean, and a choking of the machine is prevented.

The device E, for pressing the pomace, is arranged on the rear end of the platform A; and it consists of a curb, *o*, with perforated or slotted sides, in the interior of which a follower, *o'*, is made to move up and down by means of a screw-spindle, *p*, and hand-wheel *p'*. The screw-spindle screws in the cross-bar *p** of the frame F, and it is steadied in its up-and-down motion by a spider, *q*, attached to the screw-spindle by a sleeve, *q'*.

By the arrangement of the crushing apparatus and of the pressing device on the same platform the operation of making cider is considerably facilitated, and by the application of runners to the platform which bears the working parts of the cider-mill the whole apparatus can be readily moved from place to place, and put into operation wherever it may be desirable.

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

The arrangement of the scraper D, oscillating lever *l*, spring-lever *m'*, and crushing-rollers *d d'* with the wiper *m* and master-wheel, in the manner herein shown and described.

P. J. BERLIN.

Witnesses:

J. A. BUCK,
C. G. MARKLE.