No. 863,937. PATENTED AUG. 20, 1907.

F. NOÉ.

GRINDING MACHINE.

APPLICATION FILED MAR. 28, 1905.

Fig. 3.

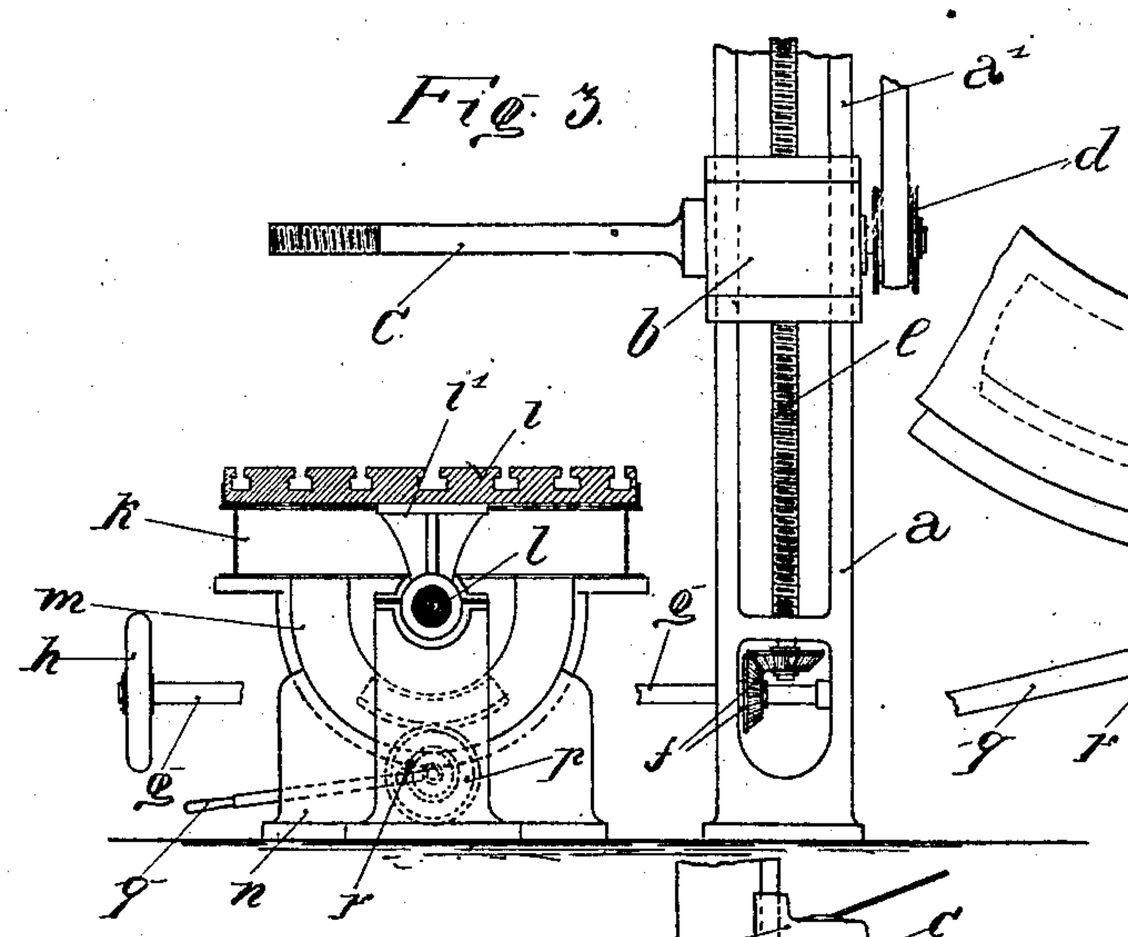


Fig. 4.

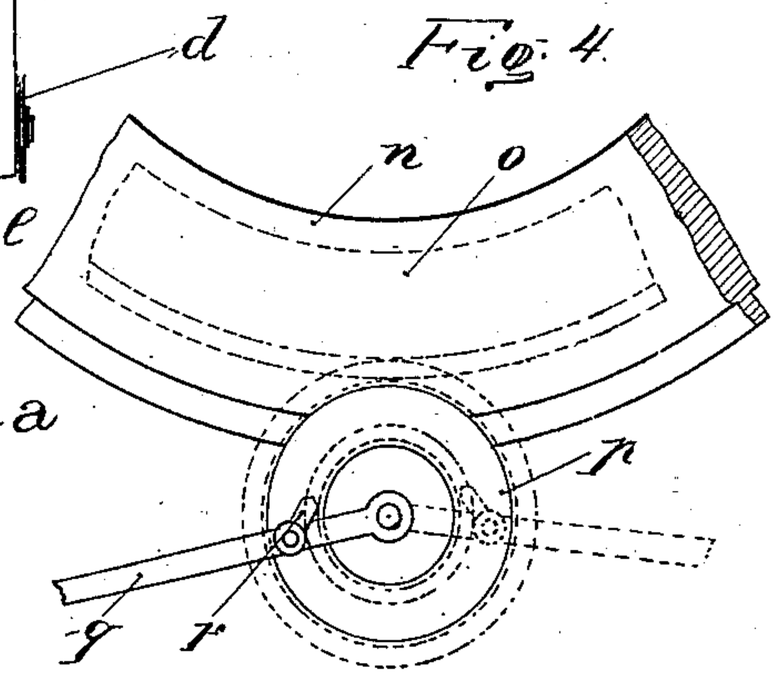


Fig. 1.

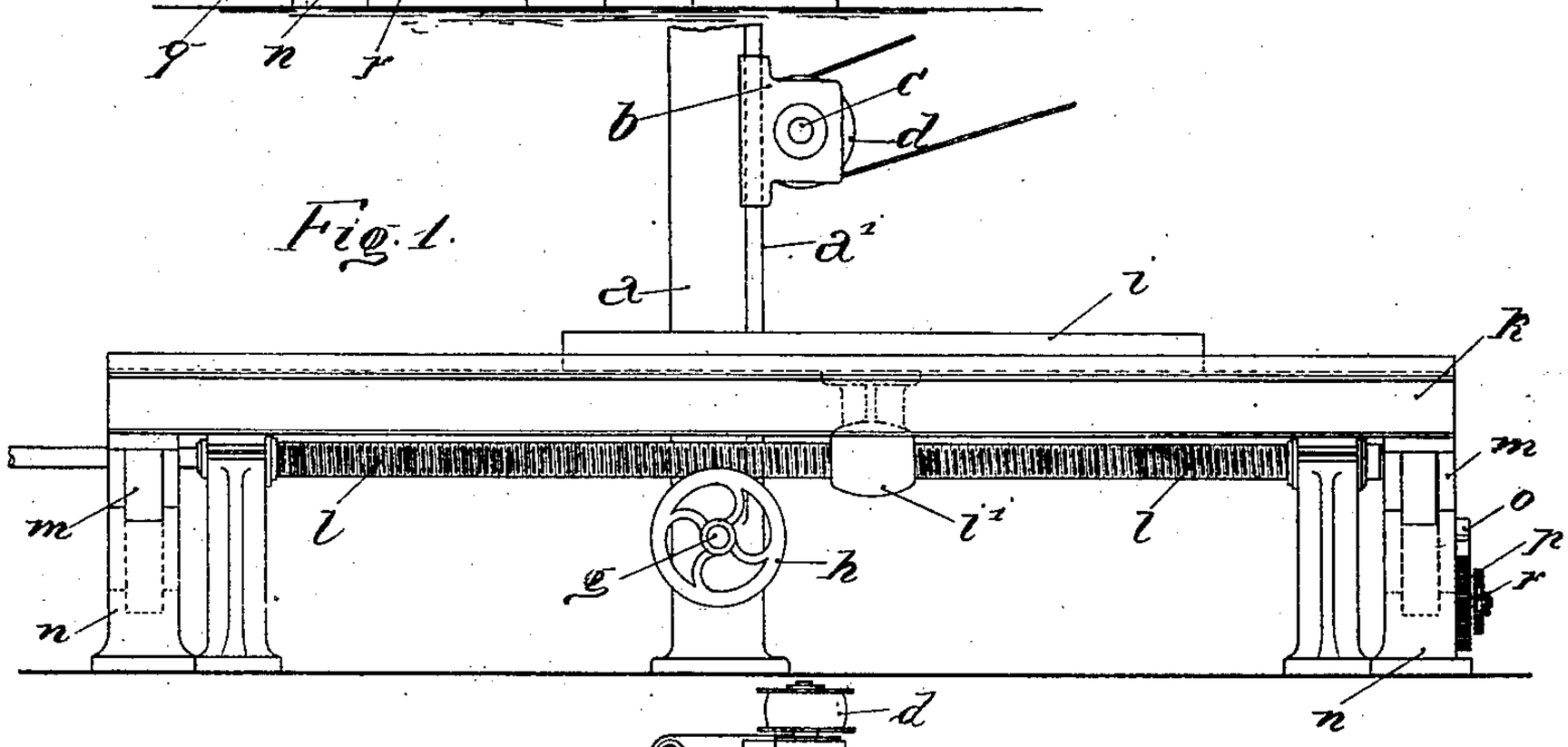
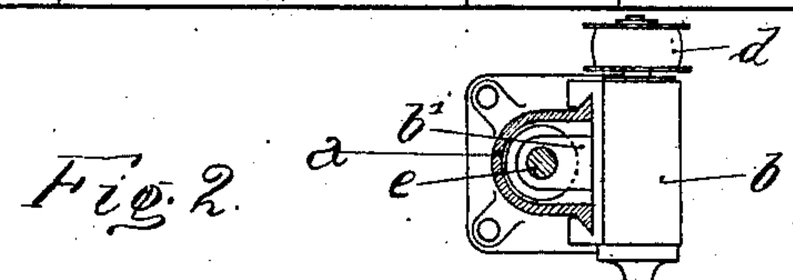
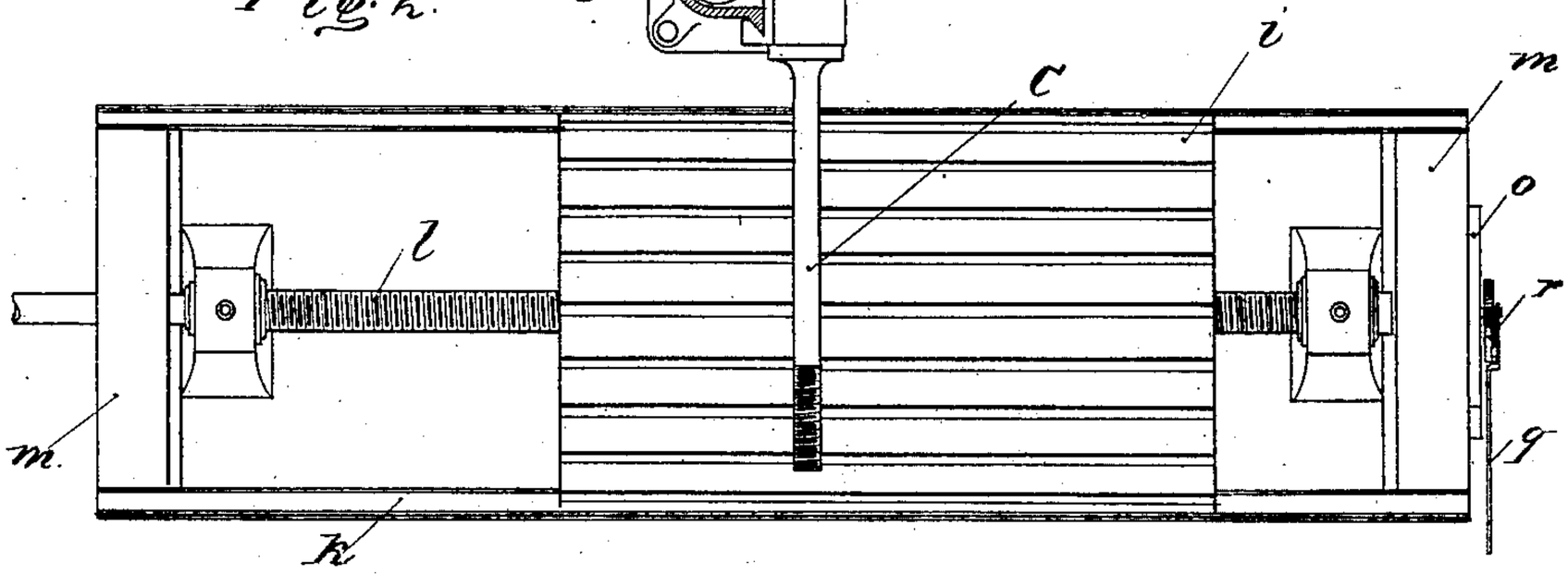


Fig. 2.





Witnesses
J. M. Skyrkoop.
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By Knight Bros. Attys

UNITED STATES PATENT OFFICE.

FELIX NOÉ, OF COLOGNE-EHRENFELD, GERMANY.

GRINDING-MACHINE.

No. 863,937. Specification of Letters Patent. Patented Aug. 20, 1907.

Application filed March 28, 1905. Serial No. 252,508.

To all whom it may concern:

Be it known that I, FELIX NOÉ, a subject of the German Emperor, and a resident of Cologne-Ehrenfeld, Germany, have invented certain new and useful Improvements in Grinding-Machines, of which the following is a specification.

This invention has for its object a profile grinding and shaping-machine for stone-blocks, the essential feature of which is that the table carrying the blocks to be worked can, during the working, be held in a slanting position, in consequence of the bed, which receives the same in a horizontal direction, being provided with semicircular cheeks, which can be turned around the center of their orbits in correspondingly shaped journal-blocks. The rotation is effected by a regulating-device, whose wheels are connected to the cheeks themselves in the manner that a special axle for rotating the cheeks, as well as the ratchet-wheels, is not required.

Such a profile grinding-machine has over the now known constructions the advantage that the tool can be turned within the widest possible limits with respect to the block or piece to be worked, while the whole structure is nevertheless very strong and steady.

On the accompanying drawing such a grinding-machine is shown in Figure 1 in an end view partly in section, Fig. 2 in a plan-view, Fig. 3 in a side-view, partly in elevation and partly in section, Fig. 4 shows a detail on an enlarged scale.

Similar letters refer to similar parts throughout the several views.

On a column or pillar a provided with guides a^1 a slide b can be moved up and down, by turning a spindle e, on the threaded part of which the nut b^1 of the slide b can be shifted. The slide b carries the spindle c on which sits the grinding-disk, and which spindle is driven by the belt-pulley d. The spindle e, by which the slide b is raised and lowered, is turned by the hand-wheel h on the shaft g, the bevel-wheels f transmitting the movement from shaft g to spindle e. In the bed k the table i can be shifted horizontally by the screw-spindle l, on which can be shifted the nut i^1 fastened to the table i. The table i, with the bed k, can moreover be turned on a horizontal axle and be adjusted in any slanting position, for which purpose there have been arranged on the same semicircular cheeks m, which can be turned around the center of their orbit, in correspondingly shaped journal-blocks n. The arrangement is preferably such that the center of the orbit of the cheeks m coincides with the center of the spindle l. The bed k, with the table i, is turned in the journal-blocks n by a toothed segment o rigidly connected to one of the cheeks m, which segment can be turned by a toothed wheel p, which has its bearings on the journal-block n. The toothed wheel p is adjusted through a pawl r, by means of a lever q. Instead of the latter arrangement a worm-gear can also be used for turning the cheeks m in the journal-blocks n.

What I claim as my invention and desire to secure by United States Letters Patent is—

1. In a grinding machine, the combination of a bed, a semi-circular cheek secured at each end of the bed, bearing blocks in which said cheeks are swingingly mounted, means engaging the cheeks for swinging the cheeks and the bed, a table arranged on the bed and a screw-spindle engaging the table to adjust the table longitudinally on the bed; the axis about which said cheeks swing coinciding with the axis of said spindle.

2. In a grinding machine, the combination of a bed, a semi-circular cheek secured at each end of the bed, bearing blocks in which said cheeks are swingingly mounted, a toothed segment rigidly secured on one of said cheeks, means engaging said segment for swinging the cheeks and the bed, a table slidingly arranged on the bed and held from swinging movement thereon, a nut on said table projecting downwardly through the bed, and a screw spindle extending below the bed longitudinally thereof and engaging said nut to adjust the table longitudinally on the bed, the axis of said spindle coinciding with the axis about which the cheeks and the bed swing.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FELIX NOÉ.

Witnesses:
WILLIAM KUEPPERS,
ALLEN F. WEYL.