No. 861,896. PATENTED JULY 30, 1907.

W. A. POWNING.

MACHINE FOR CLEANING BRICKS.

APPLICATION FILED OCT. 2, 1906.

Fig. 1.

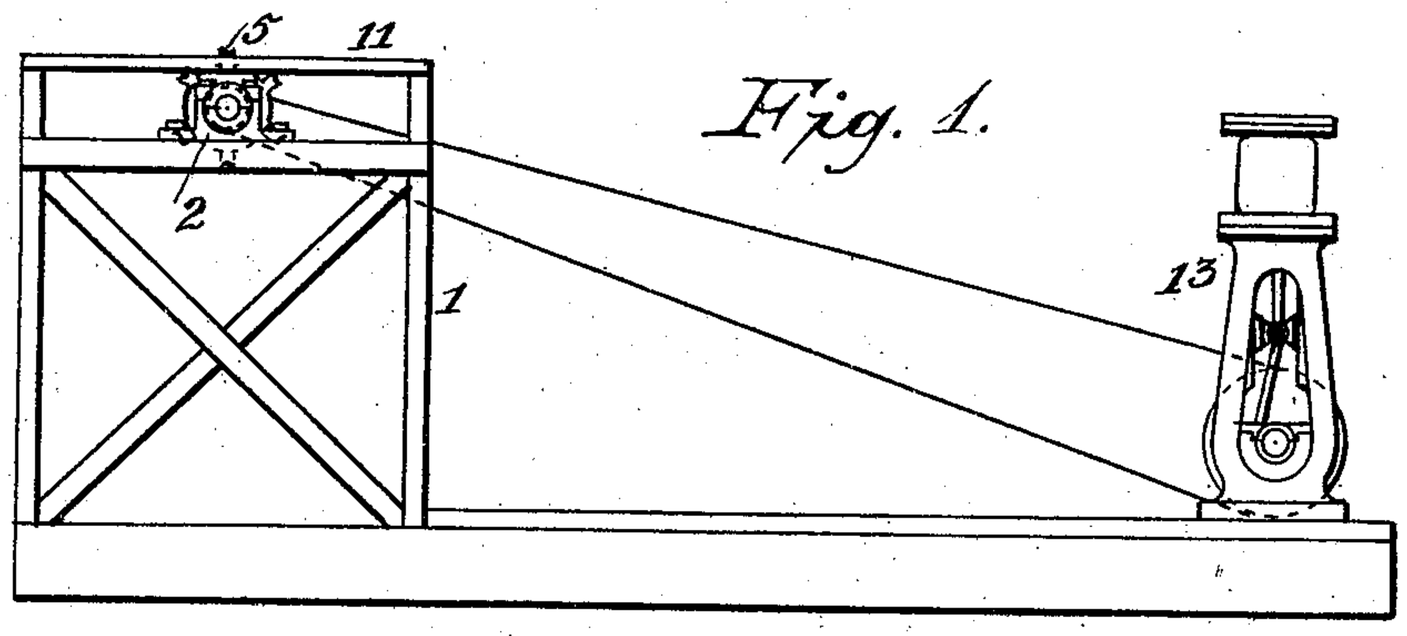


Fig. 2.

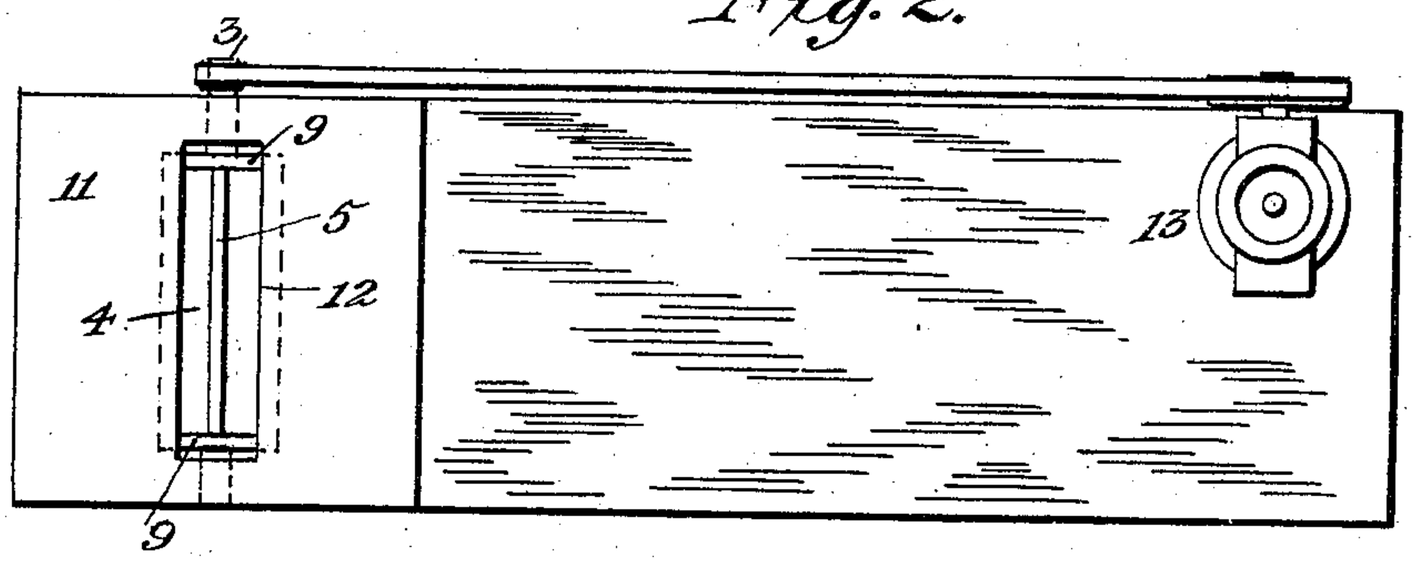


Fig. 3.

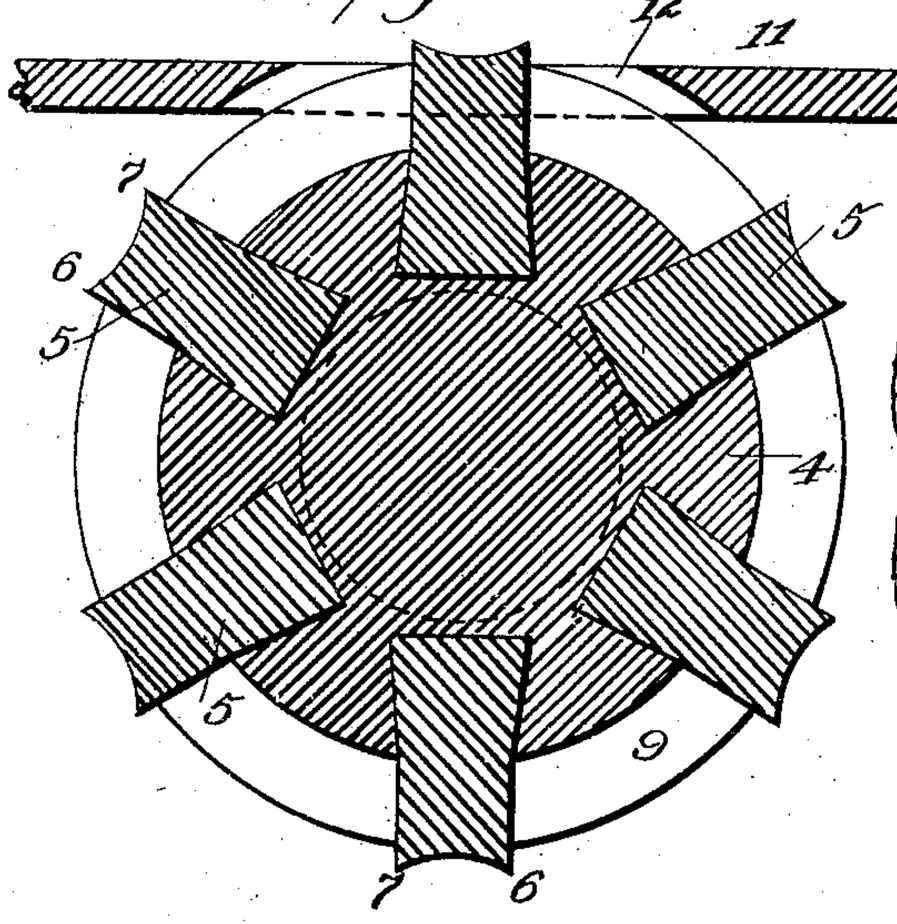
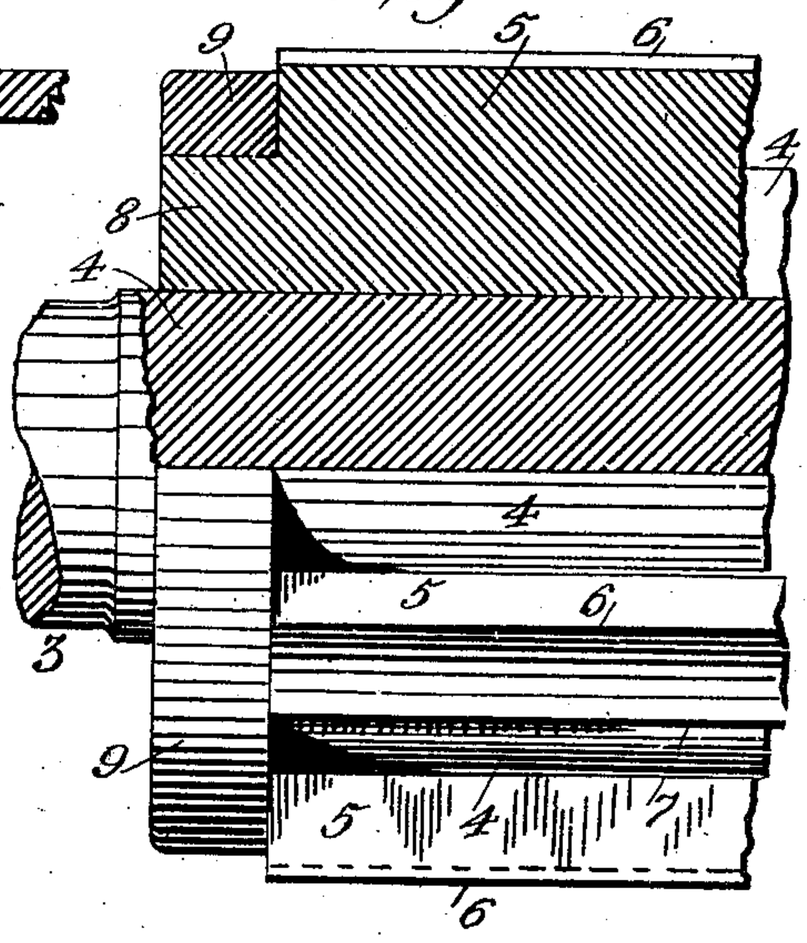


Fig. 4.



WITNESSES:

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MACHINE FOR CLEANING BRICKS.

No. 861,896. Specification of Letters Patent. Patented July 30, 1907.

Application filed October 2, 1906. Serial No. 337,091.

To all whom it may concern:

Be it known that I, WILLIAM A. POWNING, a citizen of the United States, residing at Novato, in the county of Marin and State of California, have invented certain new and useful Improvements in Machines for Cleaning Bricks, of which the following is a specification.

My invention relates to a machine for cleaning and removing from bricks, tiles, stones and like building material, any foreign substance adhering to such material, such as mortar, lime or cement.

Building blocks in the form of debris resulting from fire or the demolishment of buildings are capable of being used for various purposes, when properly cleaned.

The object of my invention is to provide a machine for cleaning such material rapidly, cheaply and effectively.

An embodiment of my invention is shown in the accompanying drawings, in which:—

Figure 1 is a side elevation of a machine constructed according to my invention; Fig. 2 is a plan view; Fig. 3 is a cross section of the rotary head and of the knives or cutters carried thereby; Fig. 4 is partly a longitudinal section, and partly an elevation of the head and cutters.

The machine is shown as supported by a suitable frame or structure, 1, which has bearings, 2, in which are mounted the projecting journals 3, of the rotary head 4. This head is, preferably, a solid cylinder, the periphery of which is provided with any suitable number of longitudinal dovetail grooves which extend from end to end. In these grooves are seated the dovetail knives or cutters 5, which project beyond the periphery of the head, as shown. I have shown six of such cutters in the drawing, but of course a greater or lesser number can be used according to the size of the machine. The outer faces of the cutters are concaved or otherwise recessed in order to provide the cutting edges 6 and 7. The ends of the cutters are reduced as shown at 8 in Fig. 4, so that a seat is provided for a ring or collar 9, which may be held in place upon the cutters and head in any suitable manner, as by shrinking it in position.

The supporting structure, 1, is provided with a table, 11, having a slot, 12, through which the cutting edges project slightly as the head rotates. Such table is preferably made of sheet iron or some other sufficiently durable material.

The head and cutters can be caused to rotate by any suitable means. I have shown in the drawings, a gas engine 13, having a belt connection with the cutter shaft, so that the latter can be driven at any speed desired. The bricks, stones or other blocks are pushed along the surface of the table, and over and in contact with the rapidly revolving cutters, the edges of which cut away all the mortar or other foreign substance adhering to the faces, thoroughly clean such faces, and so render the bricks or other blocks fit for use in building and for other purposes.

Some slight modifications which will be readily understood, come within the spirit of my invention. For instance, the cutters can be formed integrally with the head; and independent cutters, instead of being dovetailed into the head, can be bolted or otherwise secured to it. I do not, therefore, wish to limit myself to the precise construction herein described and shown in the drawing.

What I claim is:—

In a machine for cleaning bricks, a supporting frame having a slotted top, a rotary head journaled beneath said table, said head having grooves therein and cutters fitting in said grooves and having a concave recess in each of their upper faces so as to provide a plurality of cutting edges, said cutters having reduced ends, and keeper rings inclosing the reduced ends, said cutters being adapted to extend successively through the slotted table as the head rotates.

In testimony whereof, I have hereunto affixed my signature on this 5th day of September 1906.

WILLIAM A. POWNING.

Witnesses:
A. M. HOWELL,
J. B. MOVER.