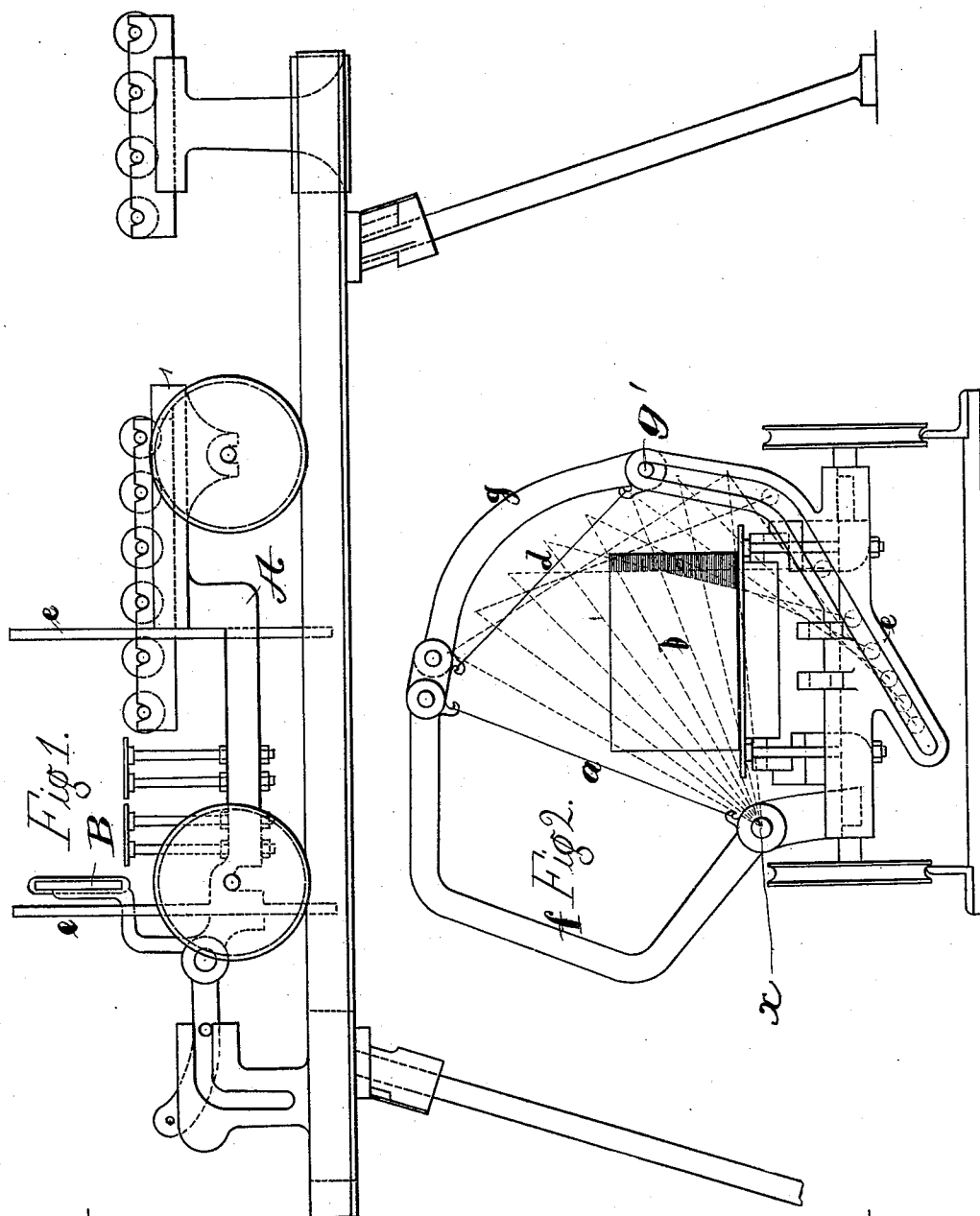


(No Model.)

E. STERN.  
BRICK CUTTING MACHINE.

No. 479,159.

Patented July 19, 1892.



Witnesses—

Jane Kingberg  
G A Tauberschmitt

Inventor—

Eugen Stern  
By his attys.  
Whitaker & Brewster

# UNITED STATES PATENT OFFICE.

EUGEN STERN, OF HELMSTEDT, GERMANY.

## BRICK-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 479,159, dated July 19, 1892.

Application filed September 9, 1891. Serial No. 405,209. (No model.)

*To all whom it may concern:*

Be it known that I, EUGEN STERN, manufacturer, of Helmstedt, in the Duchy of Brunswick and German Empire, have invented new and useful Improvements in the Manufacture of Bricks, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a cutting device for use in brick-making, its object being to avoid a burred or ragged cut in dividing the clay as it issues from the machine into pieces suitable for being dried and burned to produce bricks.

In the accompanying drawings I have shown one form of apparatus for carrying my invention into effect, and said invention is fully disclosed in the following description and claims.

Referring to said drawings, Figure 1 represents a front view of a supporting-bed for a stream of clay with the cutter removed. Fig. 2 shows my improved cutting device in position to operate upon a stream of clay.

In the improved cutting device two sets of cutting-wires are employed, the first set being connected with the second set, which by means of slide-bars or suitable appliances are caused while cutting through the clay to describe a curve, and although working in the same planes do not cross the first set of wires. The connection between the two sets of wires is made in such a way that the second set of cutting-wires cut, like the first, in a direction toward the center of the stream of clay, so as to prevent the formation of burrs.

In the drawings, A represents a supporting carriage or bed for a stream of clay, to which my cutting device is shown attached.

In cutting devices of this character as now constructed it is common to employ a pivoted frame provided with a series of tightly-stretched wires which are made to descend upon the soft clay and sever it into individual portions of the right size to form bricks. In my cutter, instead of a series of wires I employ two series of wires which operate upon opposite sides of the stream of clay and cut toward the center of the same, thus preventing ragged cuts.

In the drawings, *f* represents a frame hinged at *x* to the supporting-bed, which carries a se-

ries of wires *a*, arranged at distances apart equal to the width of a brick, and to this frame is hinged a second frame, (represented by *g*,) having a series of wires *d*, corresponding to those of frame *f*, each wire in frame *g* being in the same vertical plane as the corresponding wire in frame *f*. The bed A is provided with slotted guides *e e*, adjacent to either end of the frame *g*, the slots of which are engaged by pins *g'* on the lower end of said frame, and said slots are so arranged as to carry the lower end of the frame *g* toward the opposite side of the bed as said frame descends.

When it is desired to cut a stream of clay into bricks, the stream is led upon the bed A until it is stopped by the stop-board B, and the frame *g* is depressed, carrying with it frame *f*. The series of wires of both frames engage the opposite upper corners of the stream of clay at about the same time as shown by the dotted lines, and as the frames descend the wires of frame *g* will cut into the clay a certain distance, as shown by the parallel lines at *c*, leaving the wires of frame *f* to completely sever the clay; but the cutting in by the wires *d* of the frame *g* enable the wires *a* to complete the cuts without making rough or jagged edges and the perfect angles of the severed bricks are thus secured. The frames are then raised into the position shown in Fig. 2, when the severed bricks may be removed in any usual manner, the stream of clay fed in and the cutting operation repeated.

I do not desire to be limited to the exact details of construction herein shown and described, as variations may be made in the same without departing from the spirit of my invention.

What I claim, and desire to secure by Letters Patent, is—

1. A cutter for brick-machines, consisting of cutting devices located in the same vertical plane and adapted to engage opposite sides of the stream of clay to be severed, substantially as described.

2. A cutter for brick-machines, consisting of two opposing series of cutting-wires, the wires of each series being in the same vertical plane as the wires of the opposing series and said series adapted to engage opposite sides of the stream of clay, and means for

moving said opposing series of wires toward each other, substantially as described.

3. In a cutter for brick-machines, a series of cutting-wires and a pivoted support for the same, a second series of wires and a support for the same hinged to said pivoted support, guides for the supports for said second series of wires, adapted to force the same toward those of the second series, and means

for supporting a stream of clay intermediate to the two series of cutting-wires, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

EUGEN STERN.

Witnesses:

WM. G. SPALDING,  
N. BABBET.