(No Model.) 4 Sheets—Sheet 1.

G. KÜKENTHAL.

AUTOMATIC WIRE CLEANER FOR BRICK OR TILE MACHINES.

No. 448,053. Patented Mar. 10, 1891.

Fig. I.

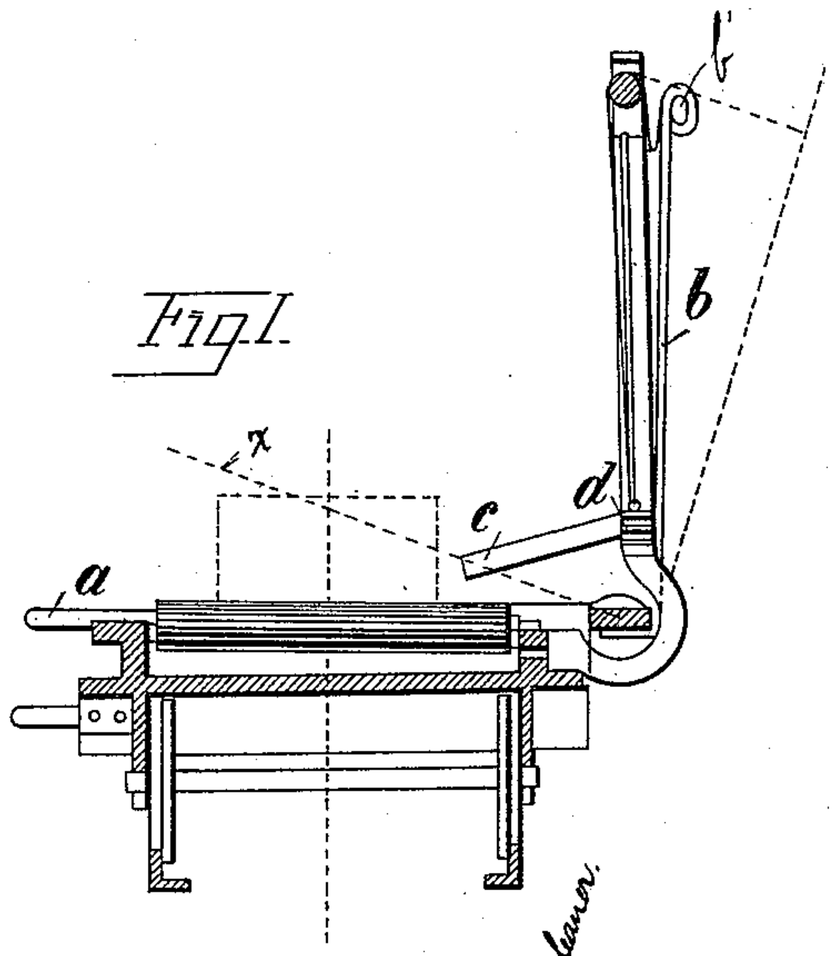

Fig. II.

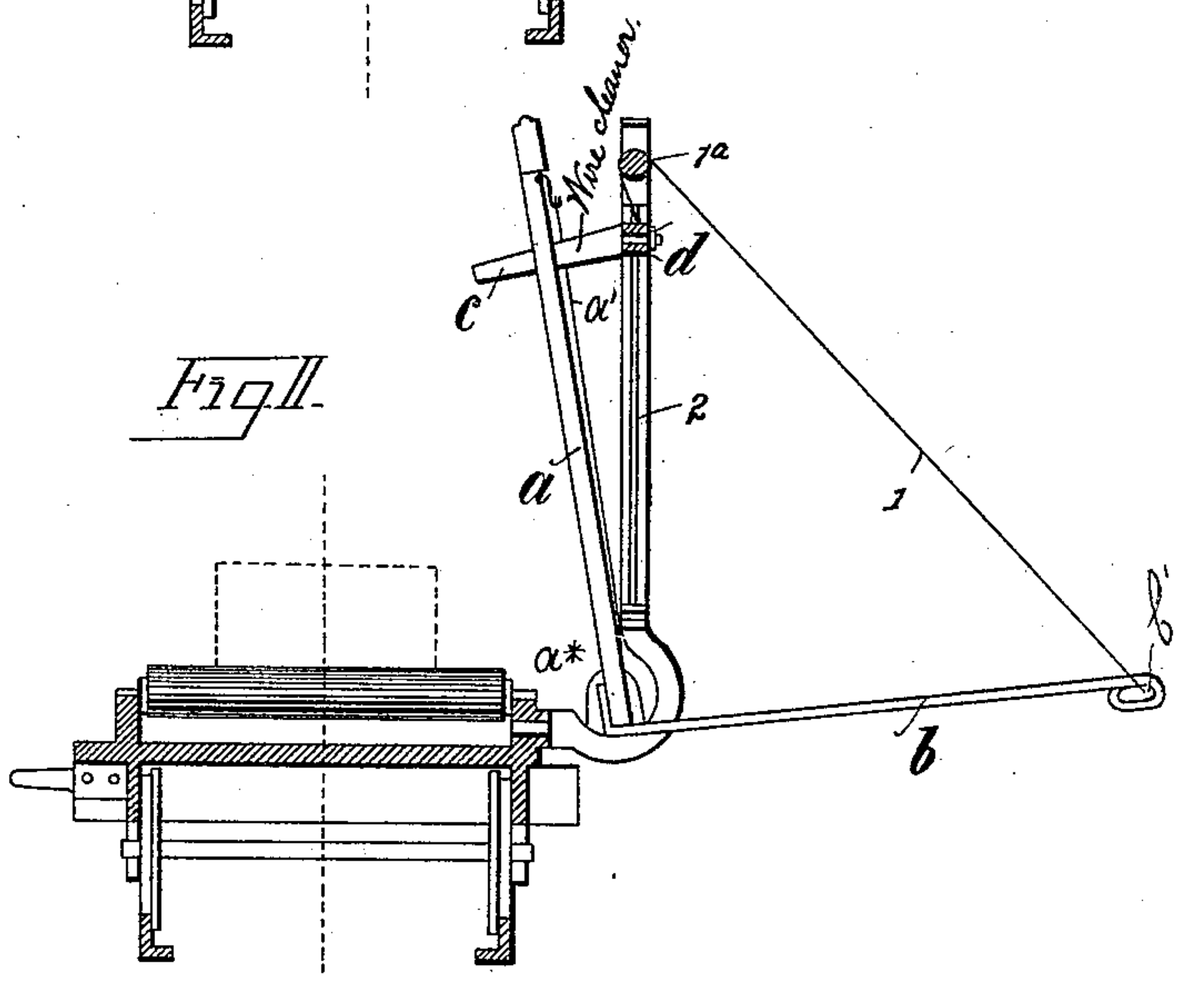

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Fig. II.

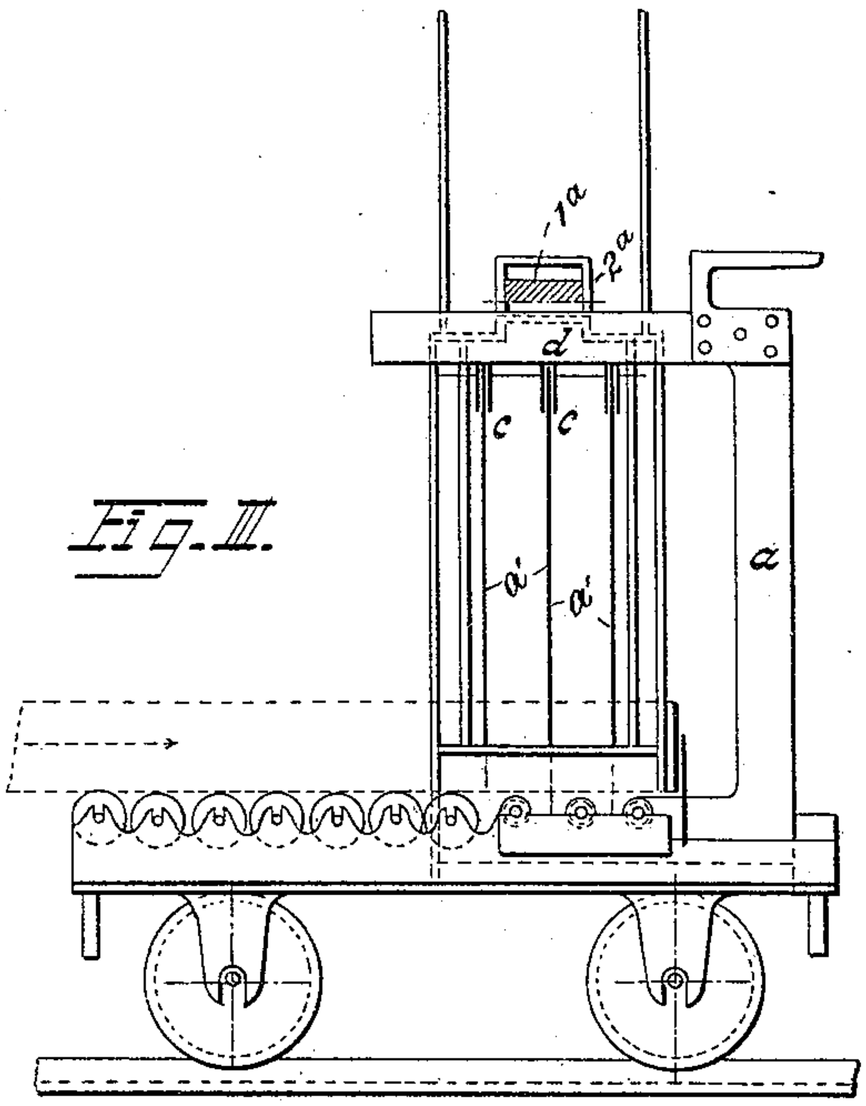
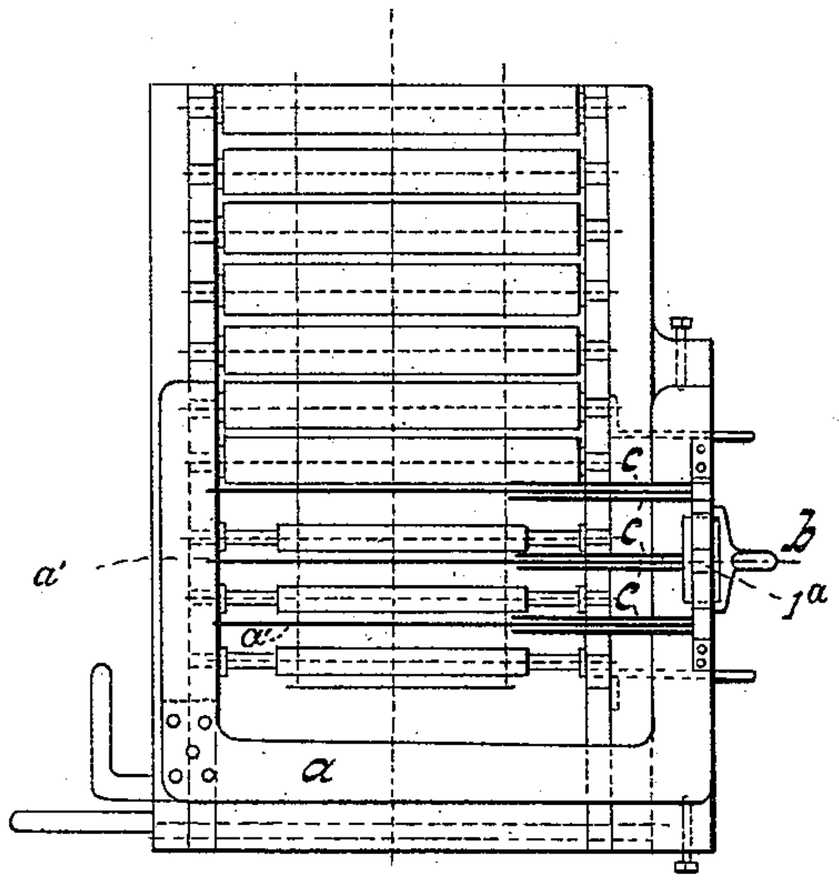


Fig. IV.



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(No Model.) 4 Sheets—Sheet 3.

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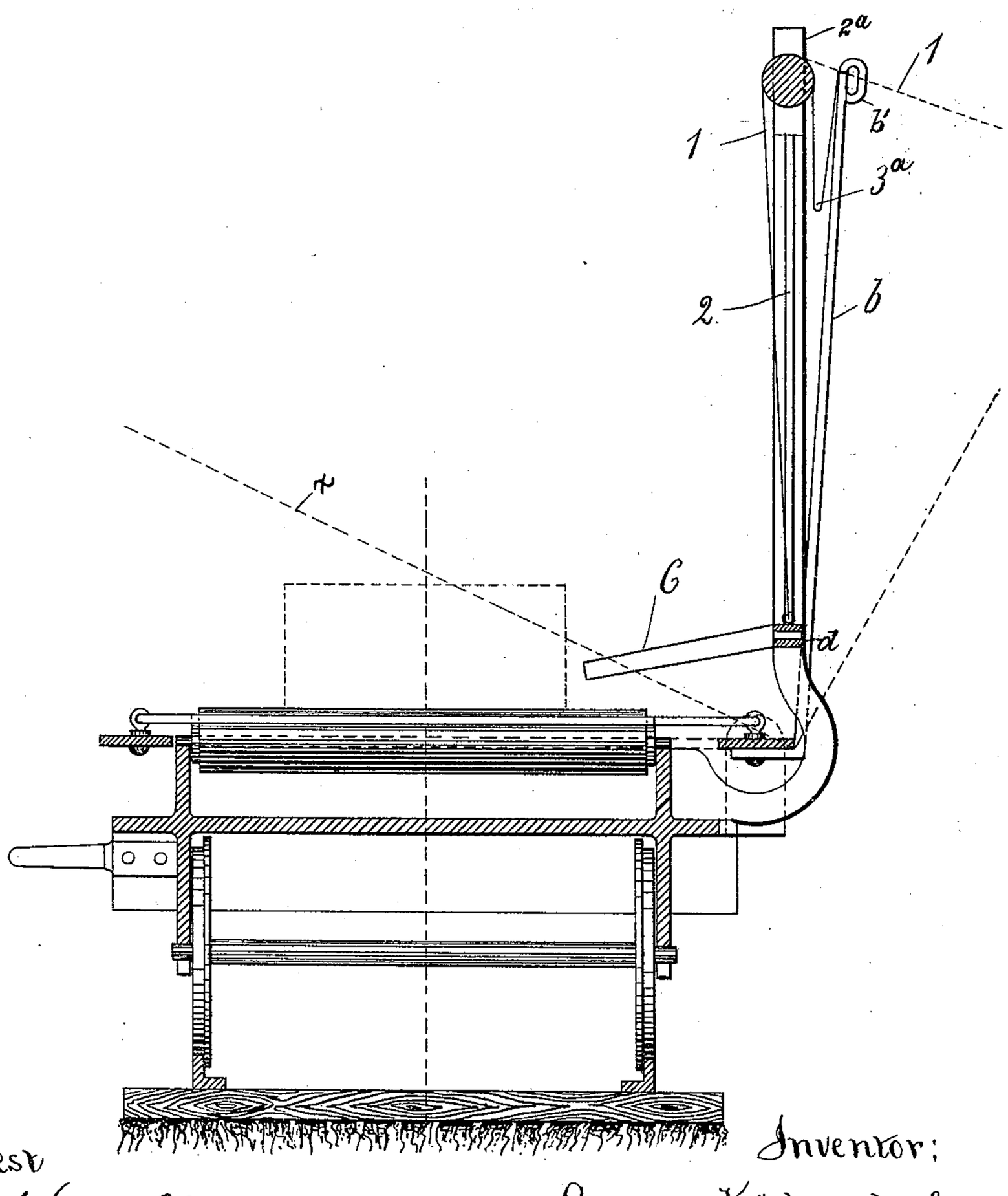
AUTOMATIC WIRE CLEANER FOR BRICK OR TILE MACHINES.

No. 448,053. Patented Mar. 10, 1891.

Fig. 3.



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(No Model.) 4 Sheets—Sheet 4.

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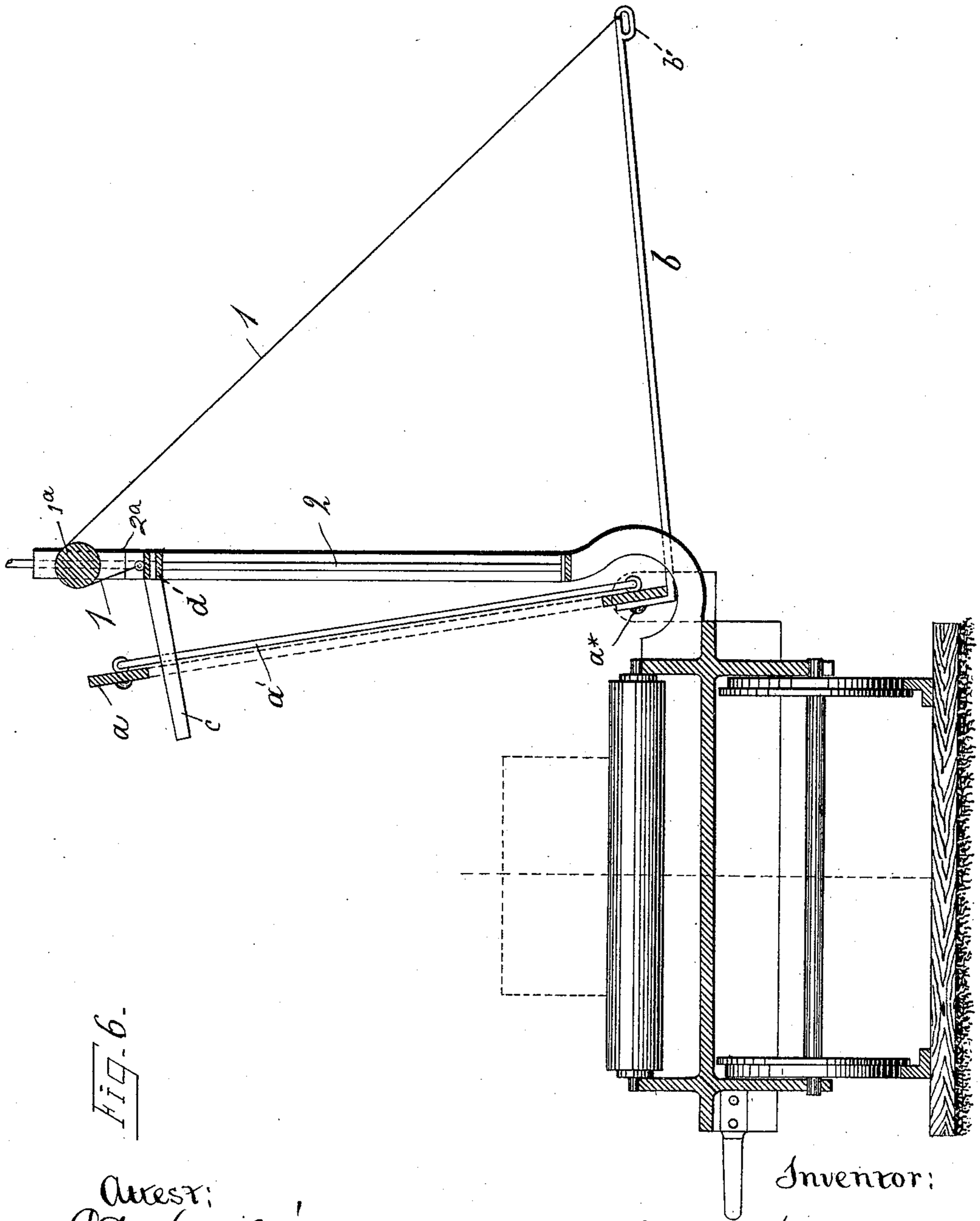

Fig. 6.

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UNITED STATES PATENT OFFICE.

GUSTAV KÜKENTHAL, OF BRUNSWICK, GERMANY.

AUTOMATIC WIRE-CLEANER FOR BRICK OR TILE MACHINES.

SPECIFICATION forming part of Letters Patent No. 448,053, dated March 10, 1891.

Application filed January 31, 1890. Serial No. 338,720. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV KÜKENTHAL, of Brunswick, in the Duchy of Brunswick and German Empire, have invented a new and useful Automatic Wire-Cleaner for Brick-Molding Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an automatic wire-cleaner for brick-molding machines.

In manufacturing bricks, tiles, &c., by machinery great inconvenience has been experienced by the cutting-wires becoming clogged with small particles of clay or vegetable matter or other foreign substances adhering to them, and thus roughening their cutting-edges and producing a ragged uneven cut in the clay when subsequently manipulated.

The object of my invention is, therefore, to provide an apparatus which will at each operation of the cutting-wires automatically scrape off any particles that may have adhered to them during the previous cutting; and the invention consists in features of novelty hereinafter described in connection with the accompanying drawings, and particularly pointed out in the claims.

In the said drawings, Figure I is a front sectional view showing the cutting-frame depressed. Fig. II is a similar view showing the cutting-frame in its elevated position. Fig. III is a side elevation showing the cutting-frame elevated. Fig. IV is a plan view showing the cutting-frame depressed. Fig. V is an enlarged sectional view showing the cutting-frame depressed, and Fig. VI is a similar view showing the frame elevated.

a represents the cutting-frame, which is hinged at $a^{\times}$ to the machine in the usual manner and which is provided with the usual cutting-wires *a'*. Secured to the lower side of the cutting-frame at a wide angle thereto is a lever *b*, which is provided at its outer end with a loop or eye *b'*. Attached to this loop *b'* of the said lever is a long cord 1, which passes upward over a pulley or roller 1^{a}, journaled in the upper ends of the standard 2^{a}, and is connected to a vertically-movable cross-bar *d*. This cross-bar is adapted to rise and fall as the lever *b* is raised and lowered, and it is guided in its movement by the ways or guides 2. Secured to the cross-bar and projecting outwardly therefrom toward the cutting-frame are a number of ductors or scrapers *c*, which are bifurcated or pronged and adapted to bear on both sides of each wire. From this description it will be seen that when the cutting-frame *a* is lowered to cut the clay the lever *b* will rise to a vertical or nearly vertical position and in doing so will permit the cross-bar to descend by its own gravity to the position shown more plainly in Fig. V. The cutting-wires having done their work, the frame *a* is raised, and of course the lever *b* thereby lowered again; but the cross-bar *d* does not begin to rise until the cutting-wires have risen to the position shown by the dotted line *x* in Figs. I and V, owing to the extra length 3^{a} in the cord 1, and thus it will be seen that as soon as the cutting-wires enter the prongs or forks of the ductors *c* the lever *b* begins to elevate the cross-bar with the ductors, and the ductors continue upward, scraping both sides of the wires as the wires themselves continue to rise to the upright position, (shown more plainly in Figs. II and VI,) thus causing the wires to be traversed throughout their full extent by the ductors and all the particles clinging thereto to be removed.

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

1. The combination, with the cutting-frame having wires, of the ductors, and a lever for moving said ductors lengthwise of the wires connected to and operated by the cutting-frame, substantially as set forth.

2. The combination, with the cutting-frame having cutting-wires, of the cross-bar carrying ductors, a lever connected with said cross-bar for dragging the ductors along the wires, and said lever being also secured to and operated by the cutting-frame, substantially as set forth.

3. The combination, with the cutting-frame having cutting-wires, of the cross-bar carrying ductors, a lever secured to said cutting-frame, and a cord connecting said lever with said cross-bar, substantially as set forth.

4. The combination, with the cutting-frame

having cutting-wires, of the cross-bar having ductors, ways for guiding said cross-bar, and a lever secured to and operated by said frame and having connection with said cross-bar for operating the same, substantially as set forth.

5. The combination, with the cutting-frame having wires, of the cross-bar having ductors, ways for guiding said cross-bar, a lever secured to said cutting-frame and moved thereby, a cord attached to said lever and cross-bar, and a roller over which said cord passes.

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

GUSTAV KÜKENTHAL.

Witnesses:
W. BINDEWALD,
CARL GRAF.