

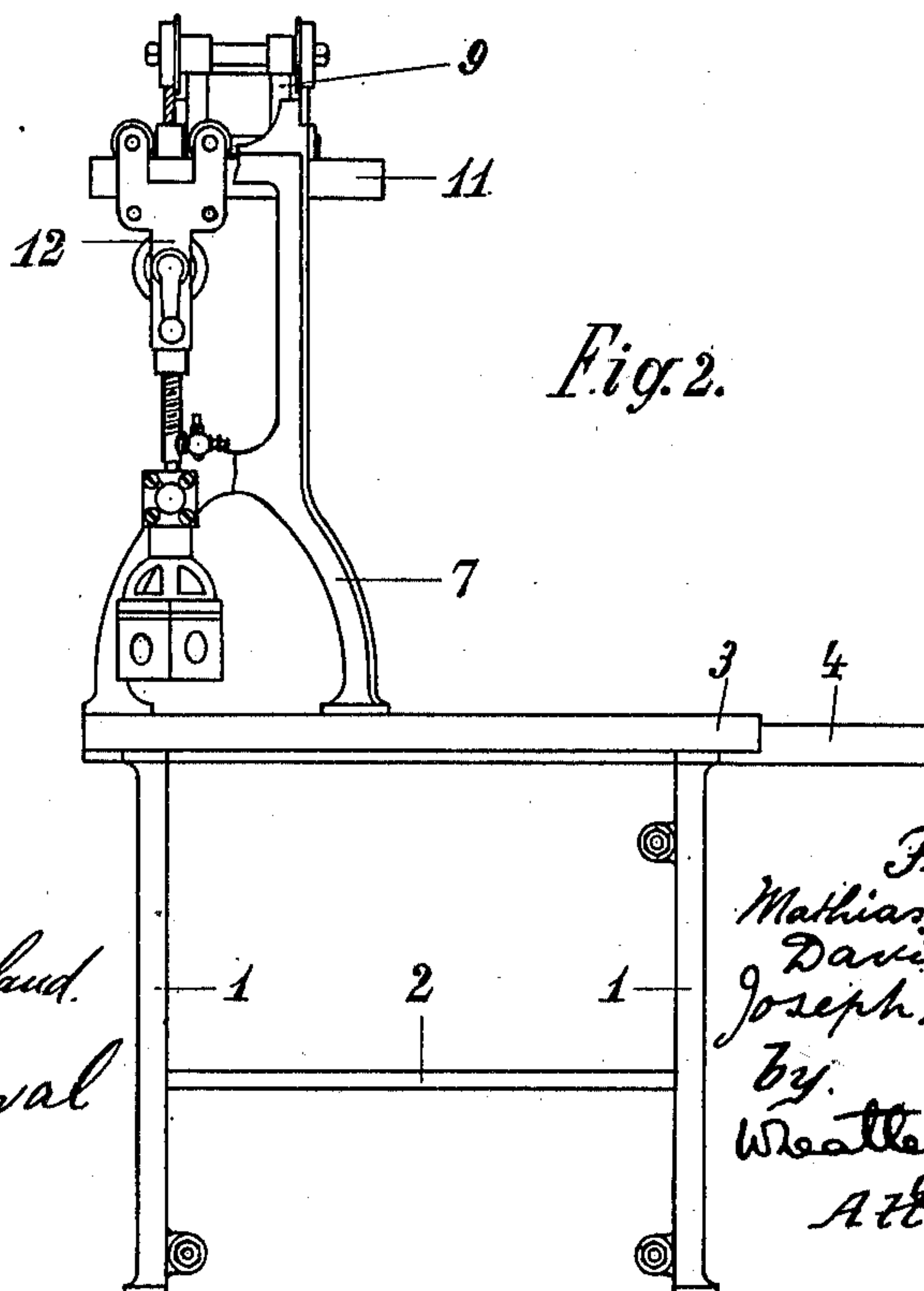
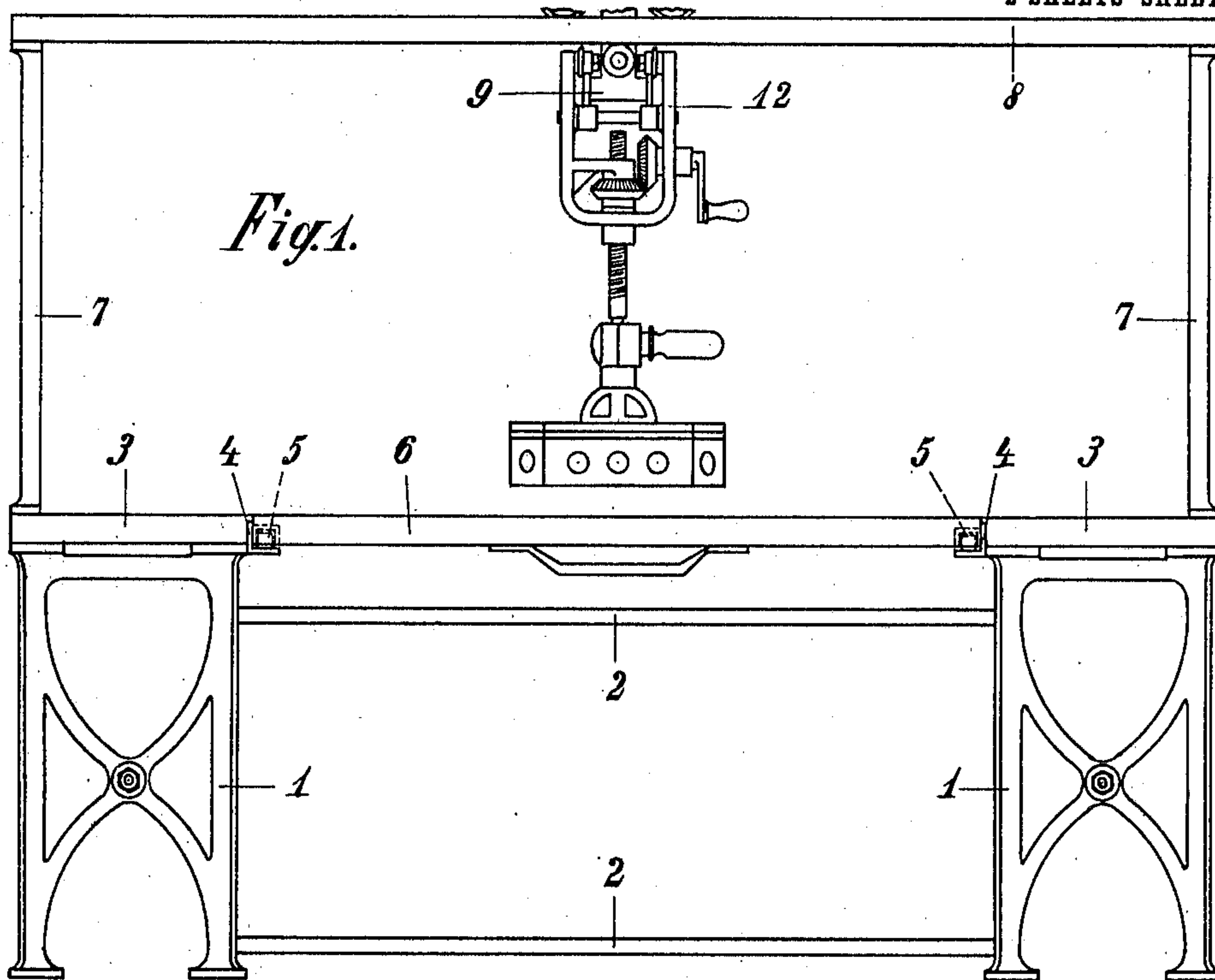
M. ACHENBACH, D. DREIFUS & J. LEHMANN.
IRONING MACHINE.

APPLICATION FILED FEB. 26, 1908.

982,778.

Patented Jan. 31, 1911.

2 SHEETS—SHEET 1.



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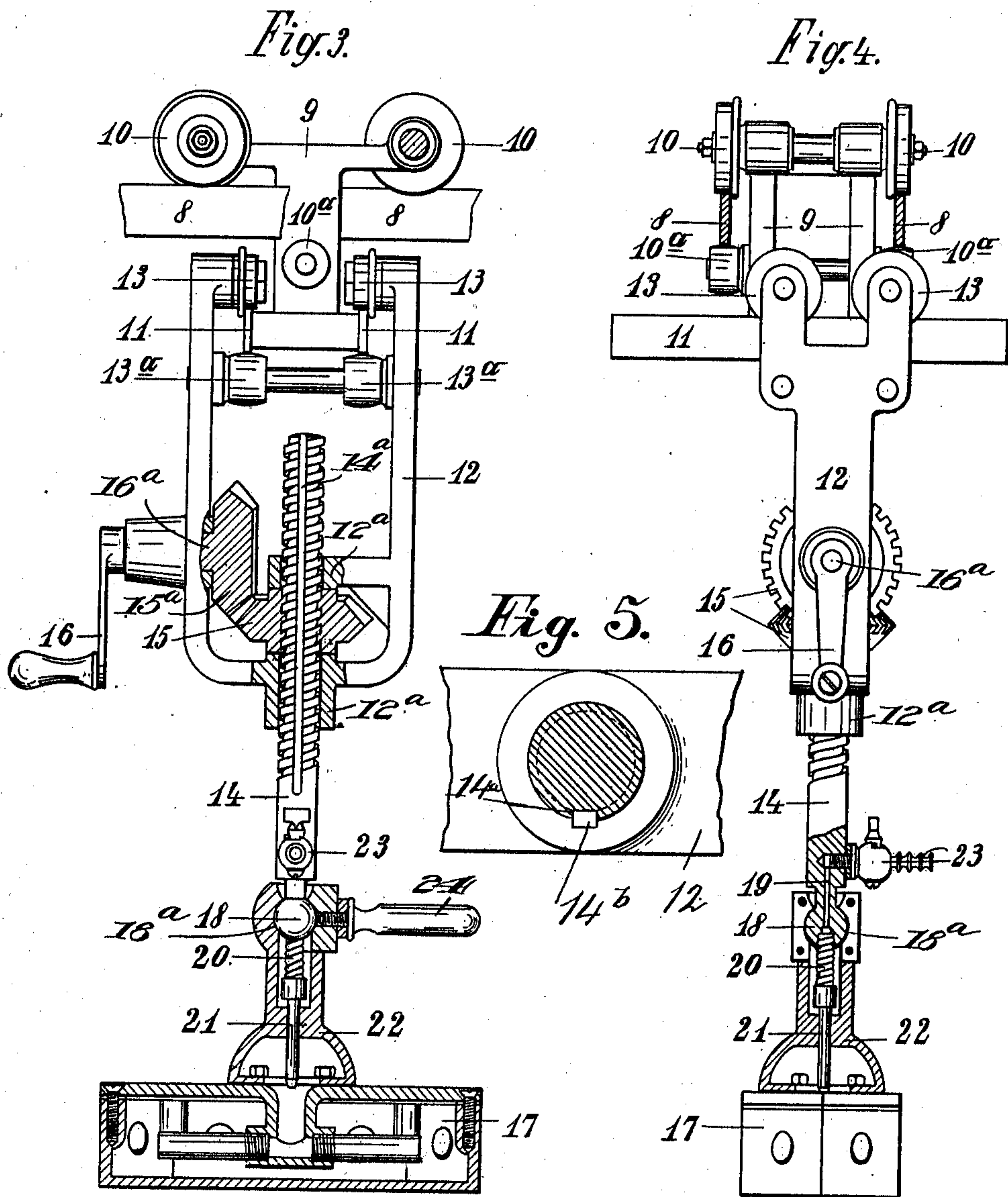
M. ACHENBACH, D. DREIFUS & J. LEHMANN.
IRONING MACHINE.

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2 SHEETS-SHEET 2.



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UNITED STATES PATENT OFFICE.

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IRONING-MACHINE.

982,778.

Specification of Letters Patent.

Patented Jan. 31, 1911.

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To all whom it may concern:

Be it known that we, MATHIAS ACHENBACH, DAVID DREIFUS, and JOSEPH LEHMANN, citizens of the Kingdom of Württemberg, Germany, and residing at Stuttgart, Germany, have invented certain new and useful Improvements in Ironing-Machines, of which the following is a specification.

The object of this invention is to provide, in an ironing machine, improved means for supporting the iron so that it may be moved back and forth, from side to side, up and down, and pivotally, in order that it may be conveniently and rapidly passed over all portions of a garment or piece of cloth.

In the accompanying drawings, Figure 1 is a front elevation of a machine embodying the features of our invention, the supporting rollers of the overhead carrier being broken away. Fig. 2 is an end elevation of said machine, with parts broken away. Fig. 3 is a detail view of the iron and its overhead carrier, portions being shown in section. Fig. 4 is a similar view, taken from the left-hand side of Fig. 3. Fig. 5 is a detail view of a means for preventing rotation of the iron-supporting shaft.

The embodiment selected for illustration comprises a supporting frame formed of the end frames 1 and the cross-bars and braces 2. Said frame supports a table-top consisting of the two stationary portions 3 and an intermediate movable portion 6. The portion 6, in this instance, is movably supported upon tracks 4 and has rollers 5 which run upon said tracks.

The iron is supported by means of an over-head carrier that travels upon a track comprising two rails 8 extending longitudinally of the machine and above the table top, said rails being supported upon the standards 7.

The over-head carrier comprises a carriage 9 which is provided with rollers 10 arranged to travel upon the upper edges of the rails 8, and rollers 10^a to engage the lower edges of said rails. The body of the carriage 9 extends downward between the rails 8 and supports at its lower end two relatively short parallel rails 11, which rails extend at right angles with the rails 8. The over-head carrier further comprises a carriage 12 which is provided with rollers 13 that travel upon the upper edges of the rails

11, and rollers 13^a contacting the lower edges of said rails.

The means herein shown for connecting the iron with the over-head carrier comprises a screw-shaft 14 extending through vertically aligned bearings 12^a in the carriage 12, said shaft being prevented from rotating with relation to the carriage by means of a spline 14^b (Fig. 5) lying within a groove 14^a in said shaft.

Means are provided for moving the shaft 14 to raise and lower the iron, which means, in this instance, comprise a gear wheel 15 having a screw thread connection with the screw shaft 14, said gear wheel lying between the bearings 12^a.

A shaft 16^a provided at one end with a crank 16 is rotatably supported in the carriage 12 and has fixed to its other end a gear 15^a meshing with the gear 15. When the crank 16 is rotated, the screw-shaft 14 is caused to move vertically in its bearings 12^a.

The iron 17 is attached to the lower end of the screw-shaft 14 by means of a ball-socket joint comprising a ball 18 on the end of said shaft, and a socket 18^a in the upper end of a stem 22 fixed to the iron. It is obvious that any suitable form of iron may be employed.

In the embodiment herein shown the iron is arranged to be heated by means of a fluid which is conducted to the iron through a flexible tube (not shown) connected with a nipple 23 on the screw-shaft 14. Said nipple communicates with a duct 19 extending axially of said shaft, the lower end of said duct communicating with one end of a flexible tube 20. The other end of the tube 20 is attached to a tube 21 in operative communication with the iron. As shown in Figs. 3 and 4, the flexible tube 20 is connected to the ball 18, the stem 22 being chambered to permit said tube to bend when the ball and socket joint is flexed.

A handle 24 provides means for moving the iron over the work.

In operation, the iron 17 is lowered upon the garment and pressed against it with the desired degree of force by rotating the crank 16. The iron may be slid back and forth and from side to side by reason of its connection with the over-head carrier, and may be tilted in any direction within the

limits of the universal joint at the lower end of the shaft 14. When a large piece is being operated upon, the table-top section 6 may be slid upon its supporting rails 4 to enable
5 the iron to reach all portions of the article.

We claim as our invention:

1. An ironing machine comprising a frame; two longitudinal rails supported by said frame; a carriage having rollers mounted on said rails, the body of said carriage
10 extending downward between said rails; two short rails attached to the lower end of said carriage and extending at right angles to the first mentioned rails; a carriage
15 mounted to travel on the second mentioned rails and depending from said second mentioned rails; and an iron movably attached to the second mentioned carriage.

2. In an ironing machine, the combina-

tion of movable means for supporting an iron, comprising a vertical shaft having a ball at its lower end; an iron having a stem provided with a socket to receive said ball, said ball having a passage therein for a heating fluid; and a flexible tube attached
25 at one end to said ball in communication with said passage, the other end of said tube communicating with the iron, said tube lying within said stem.

In witness whereof we have hereunto set
30 our hands in presence of two witnesses.

MATHIAS ACHENBACH.
DAVID DREIFUS.
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Witnesses:

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