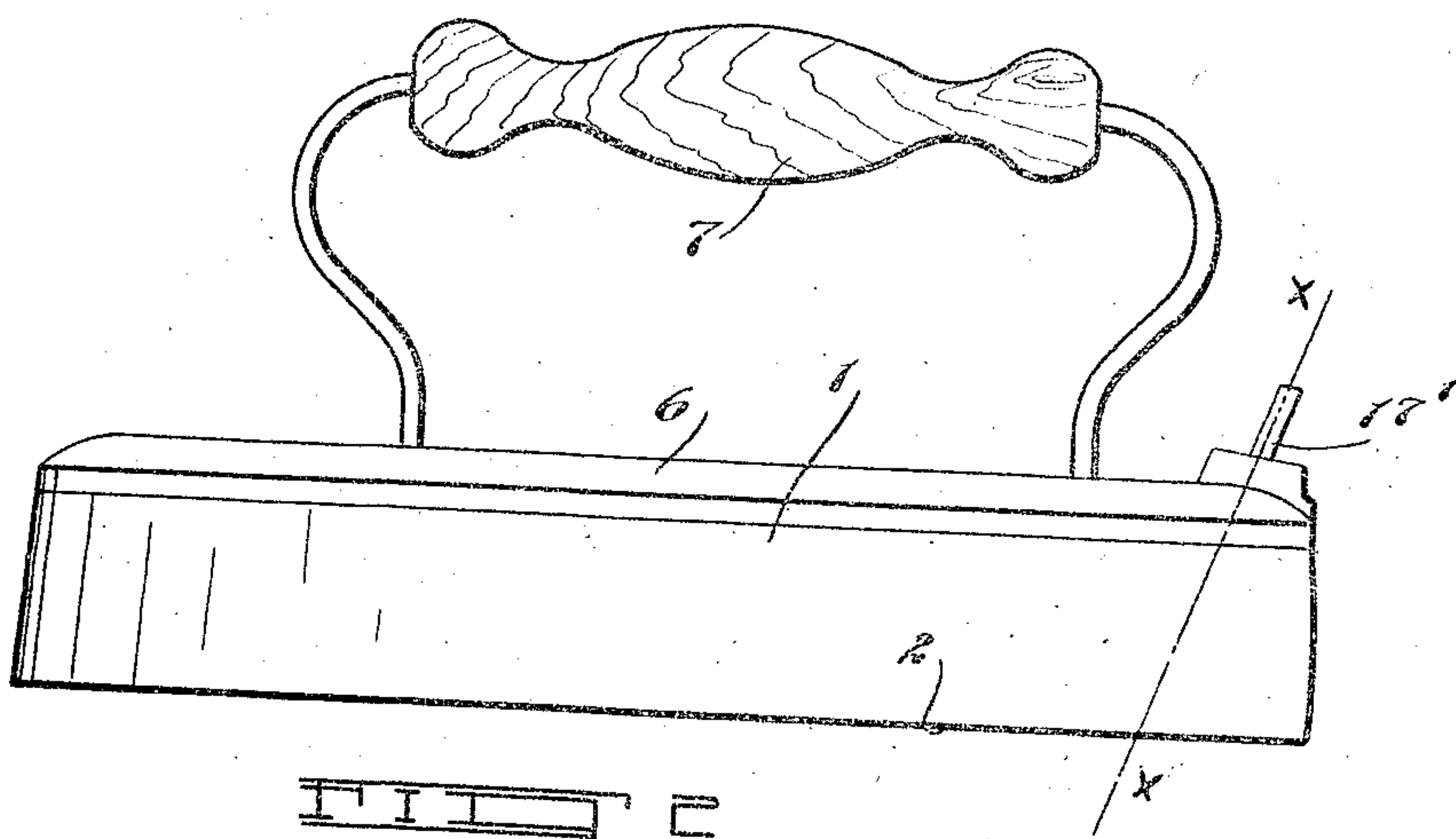
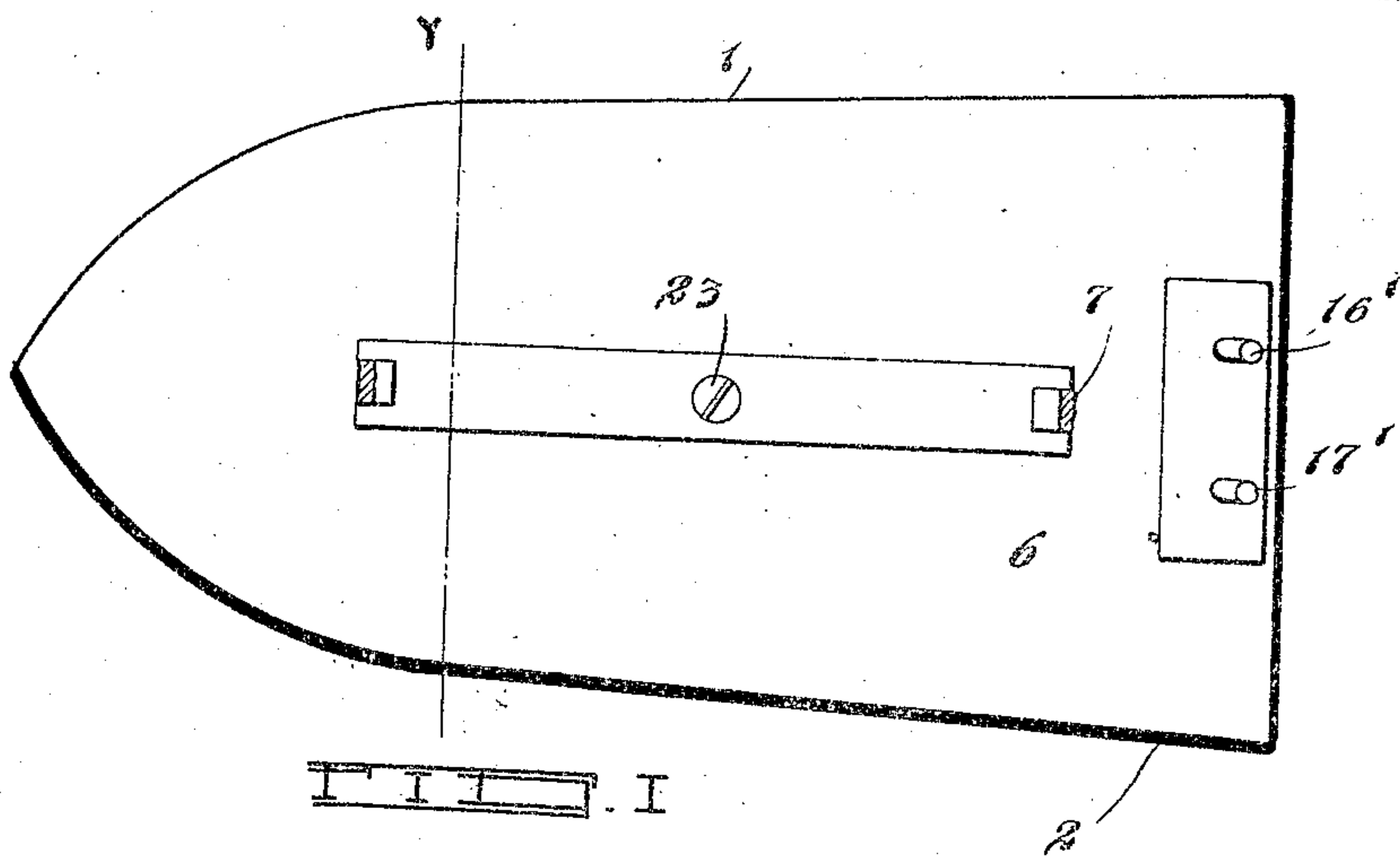


952,385.

F. TROTT.
ELECTRIC IRON.
APPLICATION FILED JUNE 28, 1909.

Patented Mar. 15, 1910.
2 SHEETS—SHEET 1.



WITNESSES
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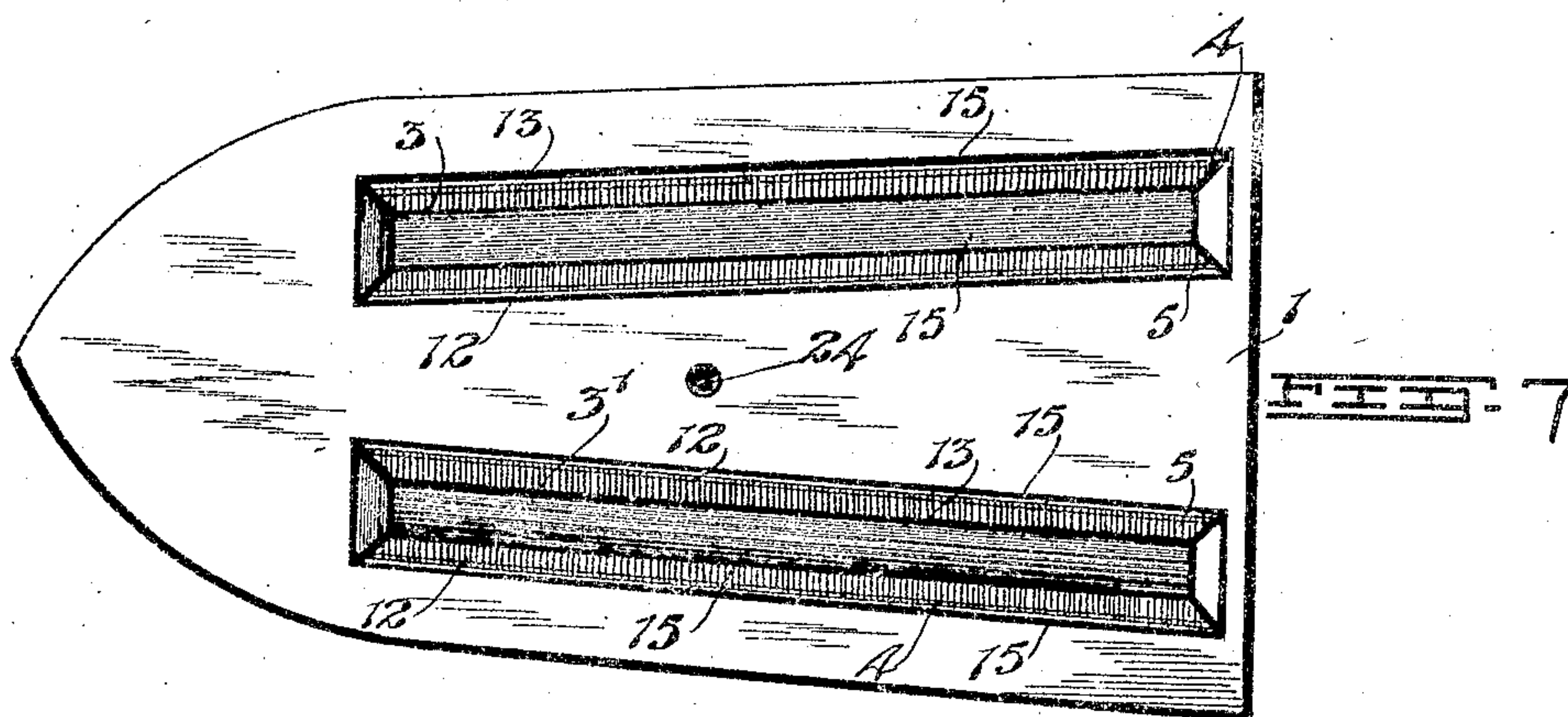
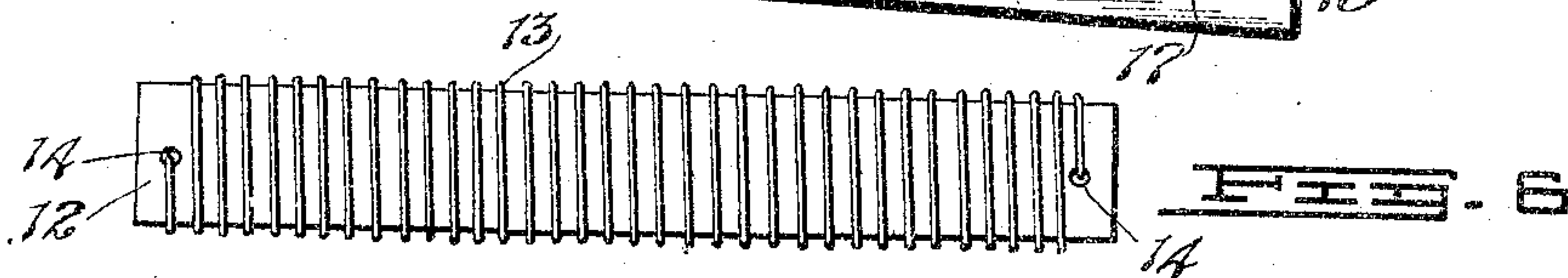
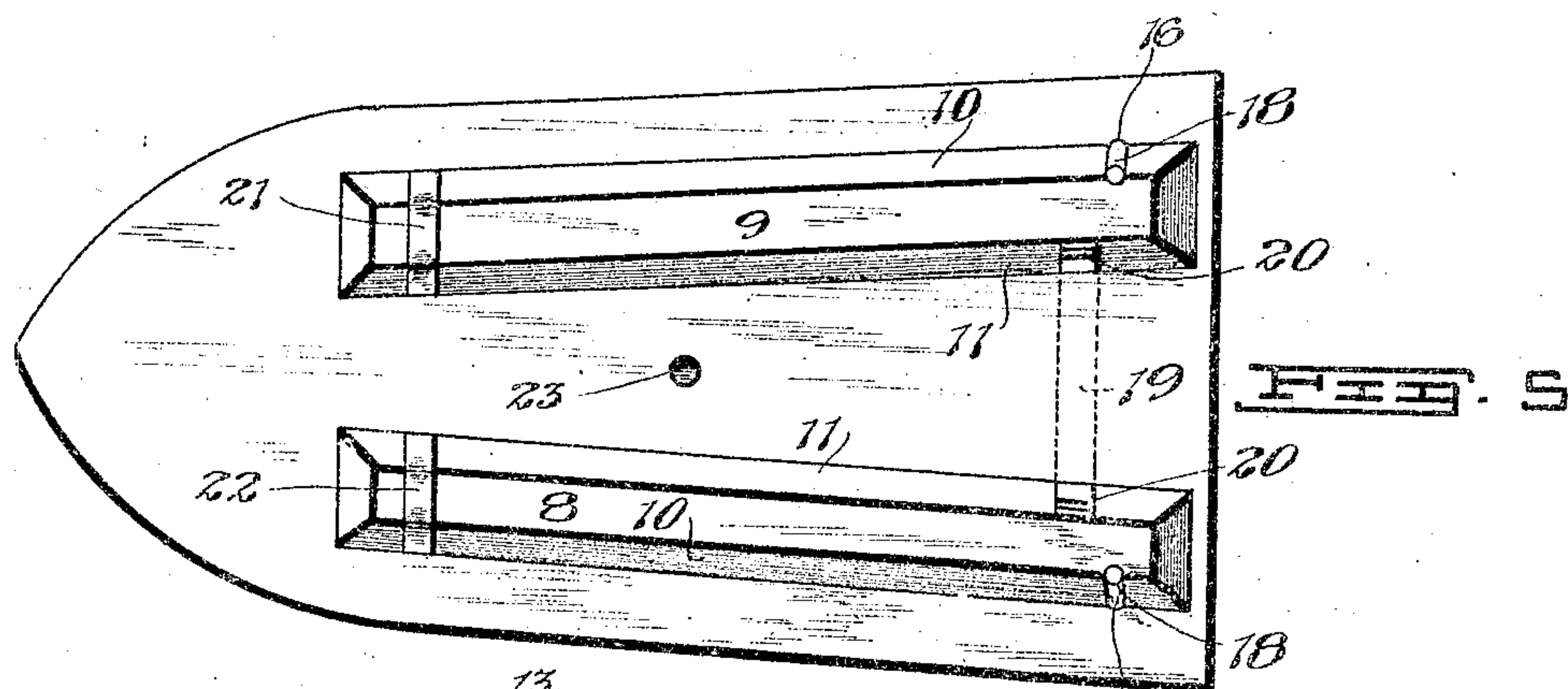
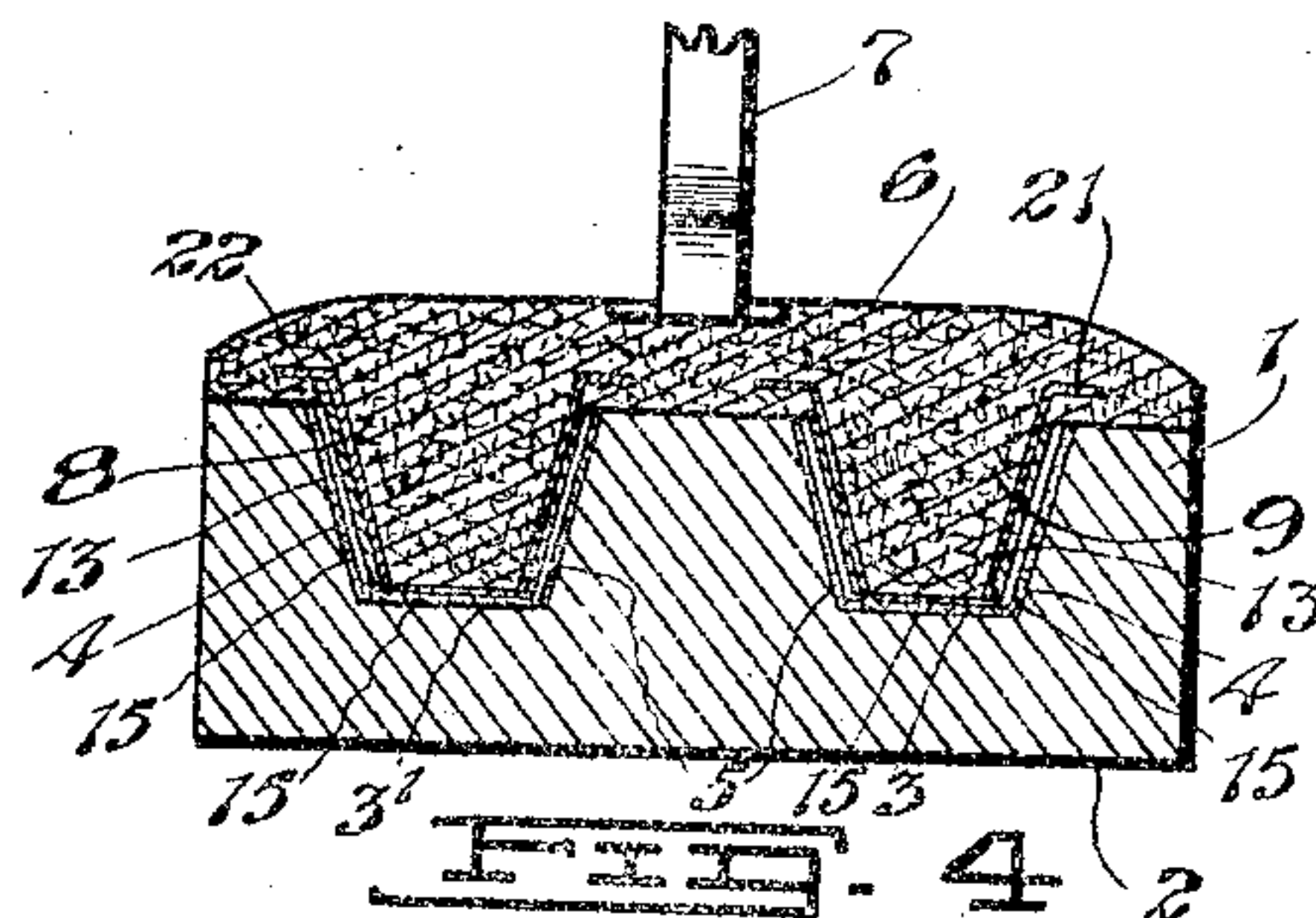
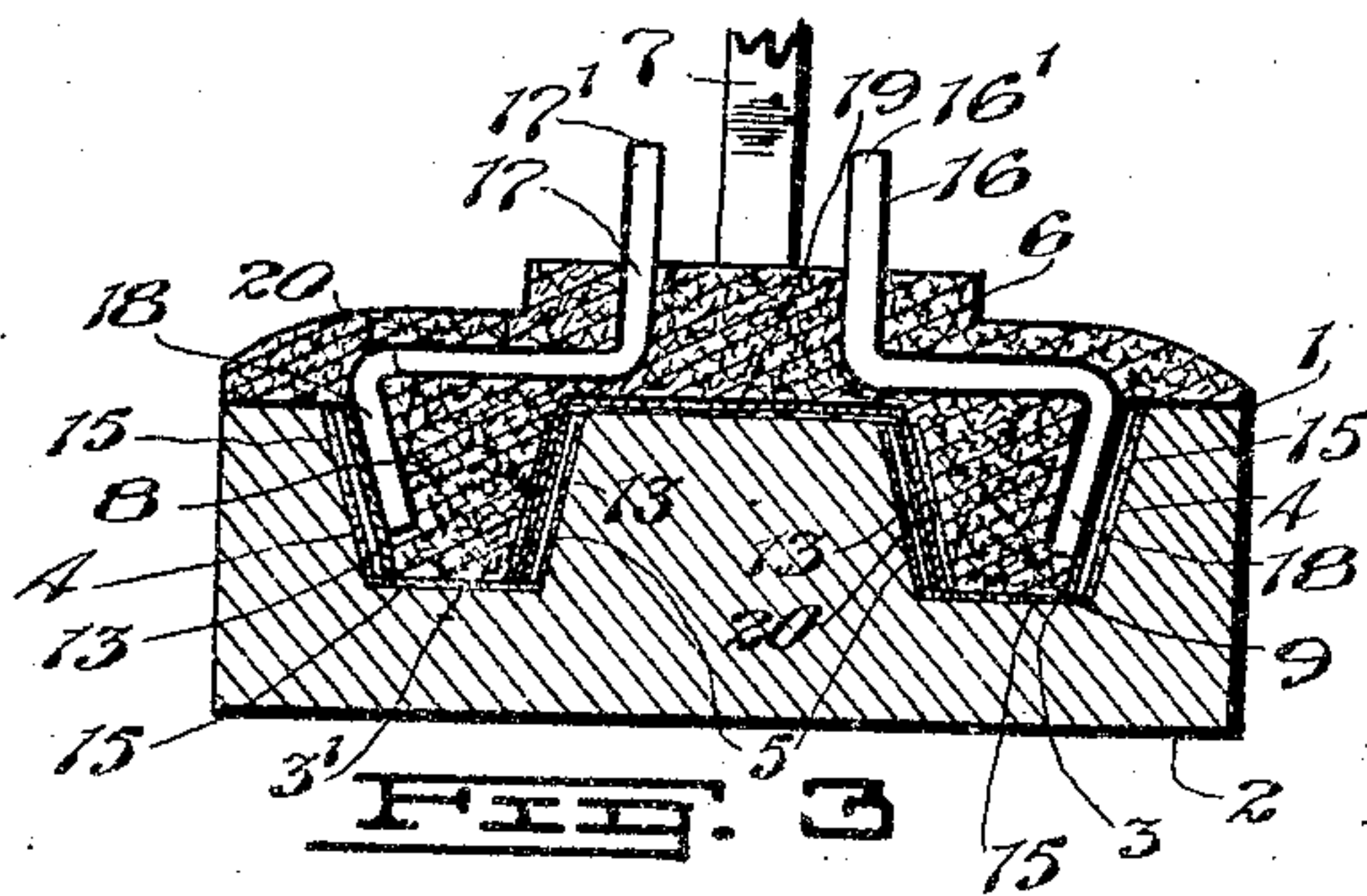
By *Frank S. H. H. H. H.*
His Att'y

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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

FREDERICK TROTT, OF WINNIPEG, MANITOBA, CANADA.

ELECTRIC IRON.

952,385.

Specification of Letters Patent.

Patented Mar. 15, 1910.

Application filed June 28, 1909. Serial No. 504,832.

To all whom it may concern:

Be it known that I, FREDERICK TROTT, of the city of Winnipeg, in the Province of Manitoba, Canada, have invented certain new and useful Improvements in Electric Irons, of which the following is the specification.

My invention relates to electric irons, and the object of the invention is to provide an iron of this class which is simple in construction, efficient in operation, strong and durable, and which has its resistance coils so arranged that they can be readily replaced, if damaged, at slight cost.

It consists essentially in a body portion having a plurality of longitudinally extending channels therein, insulating material for the channels, independently wound resistance coils adapted to be inserted within the channels, an insulating top piece or cover having facial projections adapted to fit within the channels aforesaid and carry contact making pieces, the parts being arranged and constructed as hereinafter more particularly described.

Figure 1 is a plan view of the iron with the handle broken away. Fig. 2 is a side elevation of the iron. Fig. 3 is a sectional view taken in the plane denoted by the line X X, Fig. 2. Fig. 4 is a vertical section view taken through the iron, the section being taken in the plane denoted by the line Y Y, Fig. 1. Fig. 5 is an inverted plan view of the cover. Fig. 6 is a detailed side elevation of one of the resistance coils employed. Fig. 7 is a plan view of the body of the iron, the cover having been removed.

In the drawings like characters of reference indicate corresponding parts in each figure.

1 represents the body of an iron of the ordinary form and having the usual smooth surface at 2 for ironing purposes. The body of the iron has in the present instance two longitudinally extending and opposing channels or grooves 3 3', said grooves having the side walls 4 and 5 thereof converging downwardly thereby giving the channels a wedge-shaped cross section.

6 is the cover which is formed from an insulating material such as asbestos or composition, such cover being supplied with the usual handle 7 by which the iron can be lifted.

8 and 9 are two facially projecting portions extending from the under side of the

cover, such portions being designed to pass within the channels 3 3' and having the sides thereof 10 and 11 converging downwardly in the same manner as do the walls 60 of the grooves 3 3'.

12 are strips of mica or such like insulating material upon which are wound electrical conducting wires 13 secured at their ends at 14 to the strips and forming resistance coils.

Within the channels 3 3' I have placed further strips of mica 15 which rest against the walls and on the bottom of the grooves thereby completely insulating anything placed within the grooves from the body portion of the iron.

The strips 12 carrying the resistance coils of wire are of such a length and width that they can be passed within the channels resting against the walls 4 and 5 thereof and with their upper edge below the level of the upper face of the body portion 1 of the iron.

16 and 17 are Z-shaped wires firmly embedded within the material of the cover and with their upper ends extending at 16' and 17' forming contact tips. The lower ends of the wires are exposed at 18 appearing at the sides 10 of the facial projections 8 and 9, for a purpose hereinafter explained.

19 is a yoke-shaped conducting bar having the body portion thereof embedded within the material of the cover and the ends 20 thereof extending at the inner sides 11 of the facial projections 8 and 9.

21 and 22 are independent U-shaped conducting bars passing over the facial projections and with their ends firmly embedded within the material of the cover.

It is to be noticed that the bars 21 and 22 appear at one end of the facial projections and the bar 19 and the wires 16 and 17 at the other. The cover is secured to the bottom portion 1 by means of a central set screw 23 which passes into a threaded opening 24 located in the portion 1. The parts are arranged and constructed so that when the resistance coils are placed within the grooves and the cover is secured in position there is a contact made between the outer resistance coils and the exposed lower ends 18 of the wires, and also between the inner resistance coils and the exposed ends 20 of the bar 19. The U-shaped bars 21 and 22 are designed at the same time to make contact between the opposing coils in the respective grooves.

Assuming a positive and a negative wire carrying an electric current to be attached or brought into connection with the contact tips 16' and 17', respectively, the flow of the current is as follows.—It passes from the contact tip 16' along the wire to the one end of the resistance coil located against the outer wall of the groove 3, thence along the resistance coil to the U-shaped bar 21 where a connection is made with the opposite resistance coil within the groove 3. After passing through the latter coil the current flows across the yoke-shaped bar 19 to the inner resistance coil in the groove 3' where it passed by the U-shaped bar 22 to the second or outer resistance coil within the groove 3' thence to the wire 17 and the contact 17', having made the complete circuit within the iron.

According to the construction as above described it will be seen that if for any reason one of the coils is damaged in any way, such as by burning out, there is little difficulty in removing the cover and taking the damaged coil from the iron. As the coils are small a new one can be readily inserted with little trouble and expense.

What I claim as my invention is:

1. An electric iron comprising a grooved body portion, independent resistance coils insertible within the grooves and insulated from the body portion, a cover securable to the body portion, contact terminals secured to the cover, and means carried by the cover for electrically connecting the coils in series, as and for the purpose specified.

2. An electric iron comprising a body portion having a plurality of grooves therein, a plurality of resistance coils independently insertible within the grooves and insulated therefrom, a cover securable to the body portion, contact making pieces designed to engage with two of the coils when the cover is secured to the body portion, said contact pieces having terminals appearing at the upper face of the cover, and means carried by the cover and adapted to make contact with the coils whereby they are connected in series, as and for the purpose specified.

3. In an electric iron, in combination, a body portion having longitudinally extending grooves therein, resistance coils independently insertible within the grooves and insulated from the body portion, a cover securable to the body portion, a set of terminals carried by the cover in contact with the coils and extending upwardly from the cover, and contact plates carried by the cover and adapted to electrically connect the coils in series when the cover is applied, as and for the purpose specified.

4. In an electric iron, in combination, a

body portion having longitudinally extending grooves therein, said grooves having the walls thereof converging downwardly, a plurality of resistance coils independently insertible within the grooves, said coils being insulated from the body portion and resting against the walls of the grooves, an insulating cover securable to the body portion, said cover having facial projections adapted to enter the grooves, contact making pieces carried by the cover and designed to engage with two of the coils when the cover is placed in position, said contact pieces extending to form terminals, and contact bars secured to the cover and adapted to connect the remainder of the coils in series when the cover is applied, as and for the purpose specified.

5. An electric iron comprising a body portion having longitudinally extending grooves therein, the walls of the grooves converging downwardly, a plurality of resistance coils independently insertible within the grooves, insulating strips interposed between the coils and the body portion, an insulating cover having a plurality of facial projections adapted to pass within the grooves and between the opposing coils, a set of wire forming terminals, said wires making contact with two of the coils in opposite grooves, contact bars carried by the covers interconnecting the coils within a groove in series, and a contact bar carried by the cover interconnecting a pair of coils in different grooves whereby the sets of coils within the respective grooves are electrically connected in series, as and for the purpose specified.

6. An electric iron formed in two portions, an upper and a lower portion, insulated coils held between such portions, insulated contact plates connecting the coils in series, terminals for the coils, and means for connecting the divided portions of the iron together, as and for the purpose specified.

7. An electric iron comprising an upper portion of insulating material, a metallic body portion, insulating coils connected together in series and located between the said portions, contact plates carried by the upper portion and designed to connect the coils when such upper portion is connected to the lower portion of the iron, and means for connecting the upper and lower portions together, as and for the purpose specified.

Signed at Winnipeg, in the Province of Manitoba, this 19th day of June 1909.

FREDERICK TROTT.

In the presence of—

G. S. ROXBURGH,
M. A. SOMERVILLE.