April 8, 1952 L. H. THOMAS ET AL 2,592,489

TRAVELING IRON

Filed July 31, 1950

FIG.1.

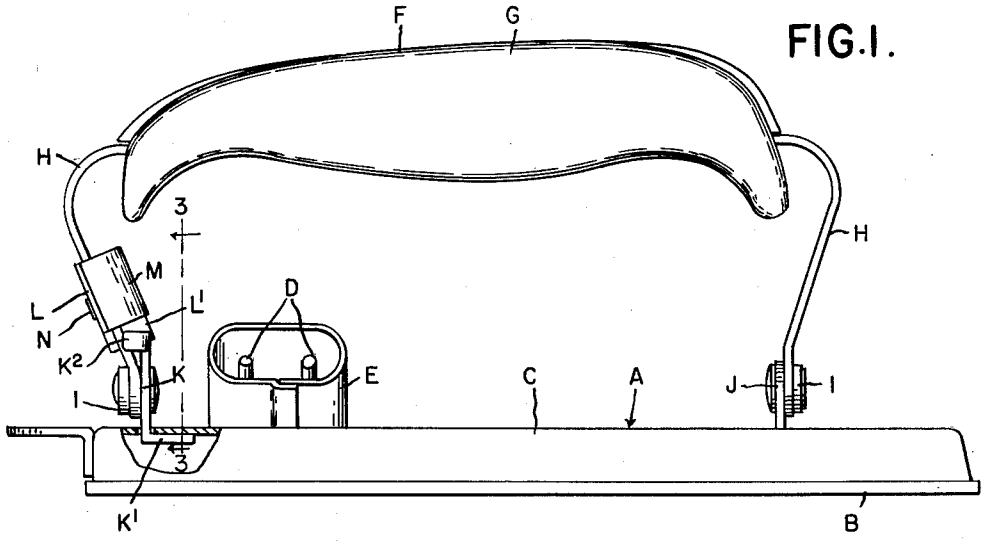


FIG.2.

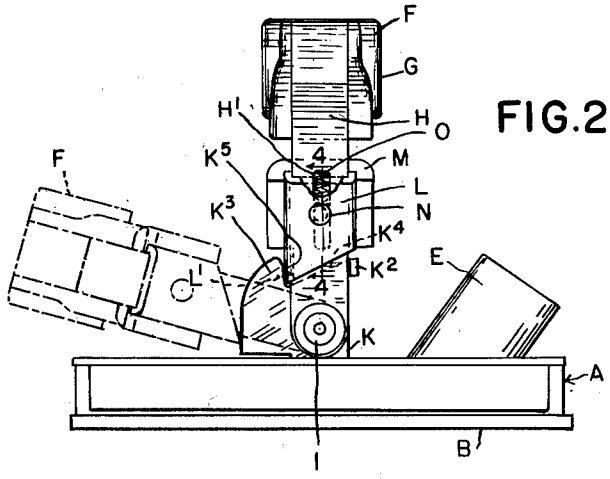
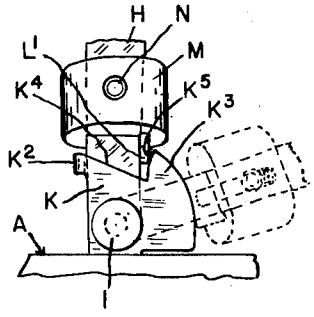


FIG.3.



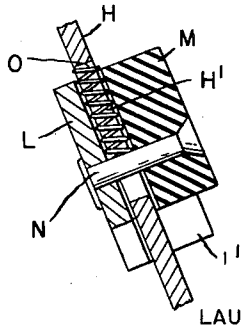


FIG.4.

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TRAVELING IRON

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3 Claims. (Cl. 38—90)

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The invention relates to pressing irons and more particularly to that type generally designated as traveling irons and which are adapted to be stored in relatively small space during transit. It is the object of the invention to obtain a structure of this type in which the handle portion can be turned to extend tranversely of the base of the iron and when turned back in position for operation will automatically lock in rigid relation to the base. To this end, the invention consists in the construction as hereinafter set forth.

In the drawings:

Figure 1 is a side elevation of our improved traveling iron showing the handle in an upright position ready for use;

Figure 2 is an end elevation showing in full lines the handle in an upright position and in dotted lines the folded position;

Figure 3 is an elevation as viewed from the line 3—3 of Figure 1; and

Figure 4 is a section on line 4—4 of Figure 2.

A is the base portion of the iron provided with a sole member B and a cap member C, which latter encloses the electrical heater unit, not shown. D are the electrical terminals of this unit which are surrounded by casing E inclining upward and adapted to receive a connector plug, not shown. F is the handle member provided with the hand-hold portion G formed of material of relatively low thermal conductivity and H are metallic arms connected within the hand-hold G and extending from opposite ends thereof downward towards the base A. The arms H are pivotally attached at I to members J and K extending upward from the cap member C, respectively, near the front and rear ends thereof. This forms a hinge connection permitting the handle G to be turned from its position for operation shown in full lines, Figure 2, to a position for storing indicated in dotted lines.

It is very important that the handle of the iron should be rigidly secured to the base when in use so as to avoid any lost motion therebetween. Quite frequently irons having hinged handles will have a certain amount of play between the base and the handle which is quite annoying to the user. With our improved construction the handle when in operative position is absolutely rigid with the base, not permitting the slightest relative movement, this being accomplished by the following construction.

The member K, which as before described, extends upward from the cap C is rigidly secured thereto, preferably by an angle flange K^1 ex-

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tending inside of the cap and welded or otherwise attached thereto. This member has on one side thereof a projecting finger K^2 forming a stop for one edge of the arm H. On the opposite side is a segment K^3 concentric with the pivot I and between these two portions is a notch K^4. Slidably mounted on the arm H is a channel-shaped member L, preferably formed of metal, and a member M formed of material of low thermal conductivity on the opposite side of the member H, embraces the flanges of the member L and is secured to the latter by a central fastening N. One of the flanges of the member L extends forward so as to overlap the member K forming a detent L^1 which bears against the segment K^3 when the handle is moved towards or from folding position and enters the notch K^4 when the handle is in upright position. A spring O, under initial compression, is arranged within a vertical slot H^1 in the arm H with its upper end engaging the upper end of the slot and the lower end engaging the fastening member N. The notch K^4 has one side K^5 slightly inclined or cammed so that when the spring-pressed detent enters the notch, it has a wedging engagement with this inclined surface K^5 thereby holding the arm H pressed firmly against the stop K^2.

It will be understood from the above that whenever the iron is to be stored for transportation, the operator merely draws upward on the member M and simultaneously turns the handle so that the detent L^1 contacts with the segment K^3 and can slide thereover during the continued downward movement of the handle. Any time the iron is to be used, the handle is merely turned upward and as soon as the detent L^1 clears the upper end of the cam face K^5, it will be moved downward by the spring O into the notch K^4 thereby locking the handle in upright position. The spring pressure on the detent L^1 always maintains the detent in engagement with the inclined surface K^5 thereby wedging the arm H against the stop K^2 and holding the handle absolutely rigid with the base, avoiding all play or lost motion.

What we claim as our invention is:

1. In a pressing iron comprising a base and a foldable handle hinged thereto, said handle including a hand-hold portion, arms extending downward from opposite ends thereof, and brackets rigidly secured to and extending upward from said base pivotally connected to said arms to form the hinge thereof; means for automatically rigidly locking said handle in operative up-

right position when raised from its folded position comprising a finger projecting from one of said brackets forming a stop for the adjacent arm, the said bracket having a notch therein forming a shoulder opposed to said stop, a slide on said arm having a projecting detent for wedging engagement with said shoulder, and resilient means biasing said slide to engage said detent.

2. The construction as in claim 1 in which said slide carrying arm is slotted, a pin on said slide passing through said slot, and a spring in said slot bearing against said pin forming the resilient biasing means.

3. The construction as in claim 2 in which the notched bracket has an edge portion concentric with the pivot thereof and upon the opposite side

from said finger against which edge portion said detent bears and is held retracted thereby when said handle is folded.

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