

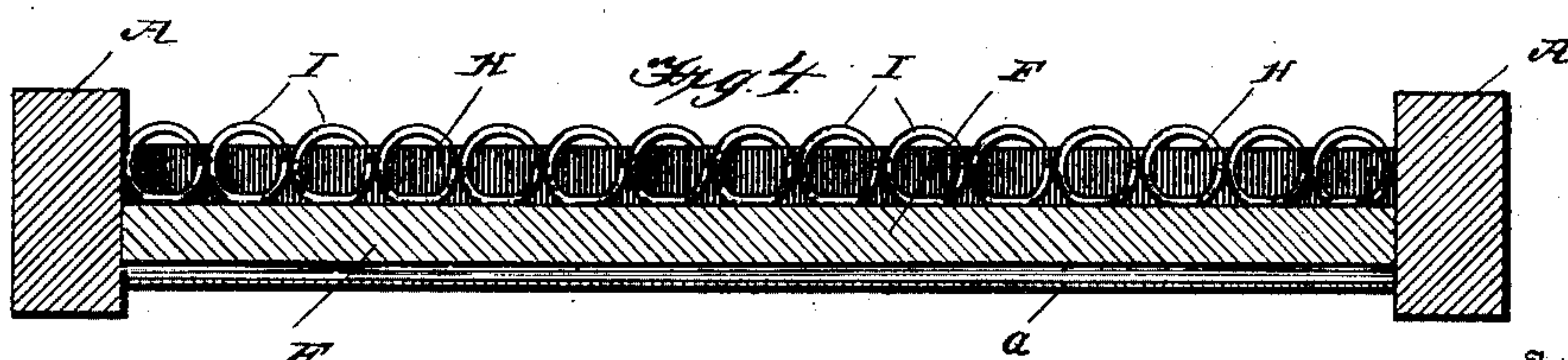
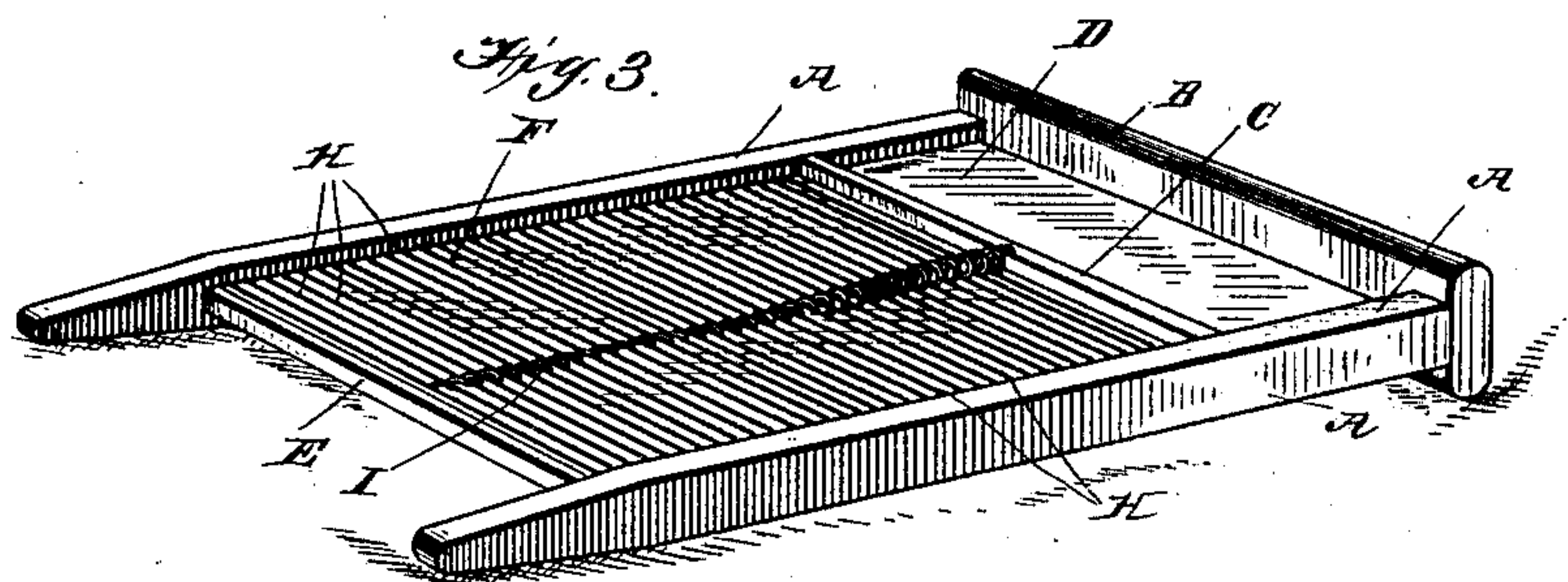
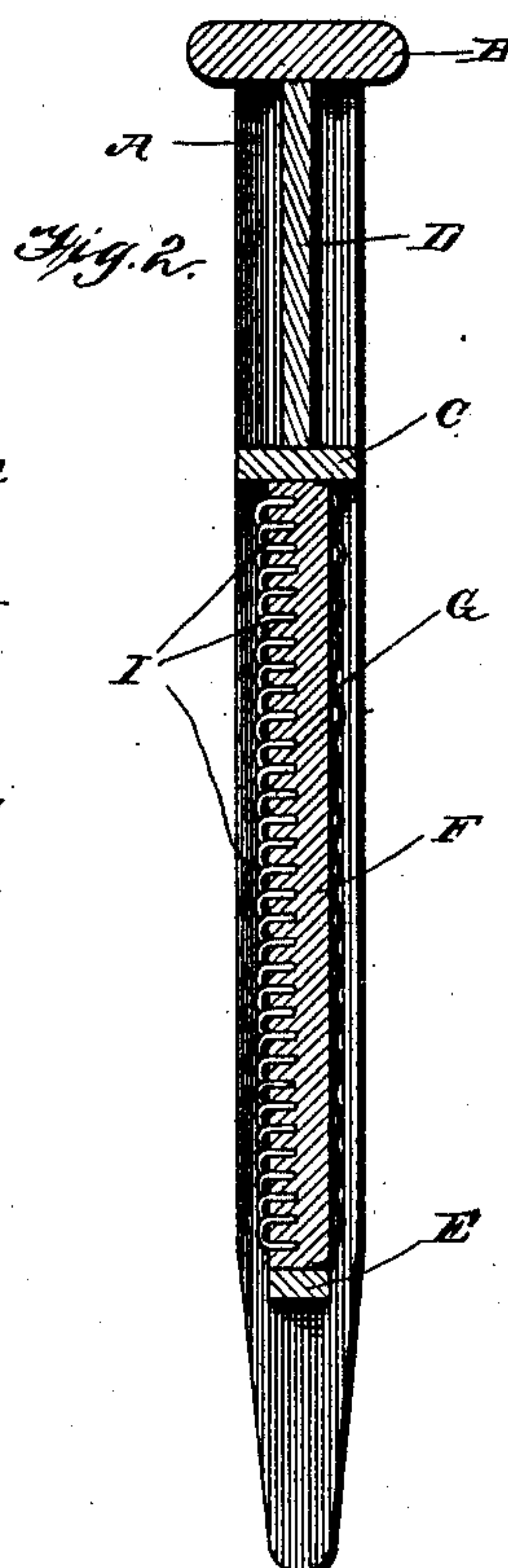
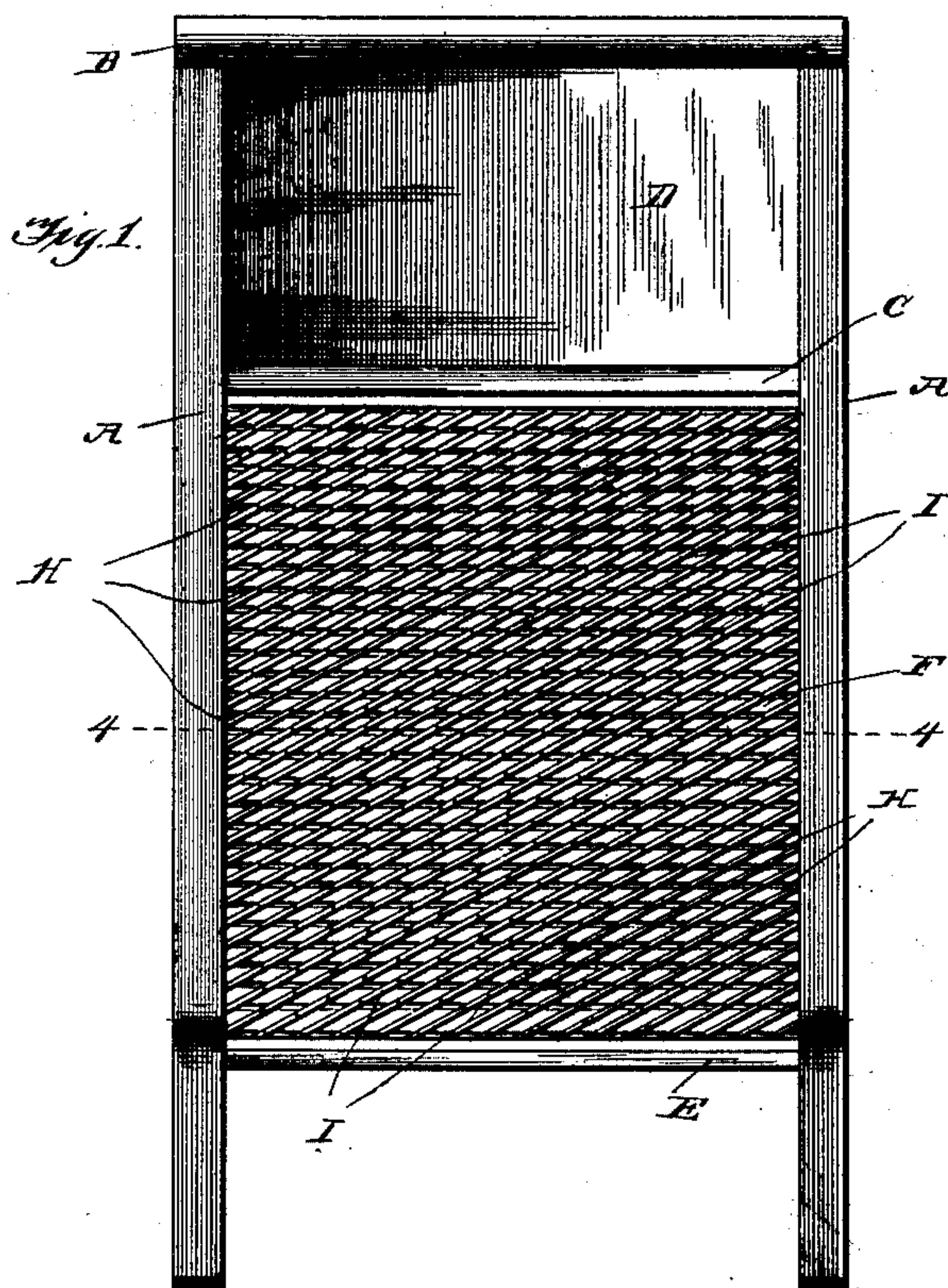
No. 660,708.

Patented Oct. 30, 1900.

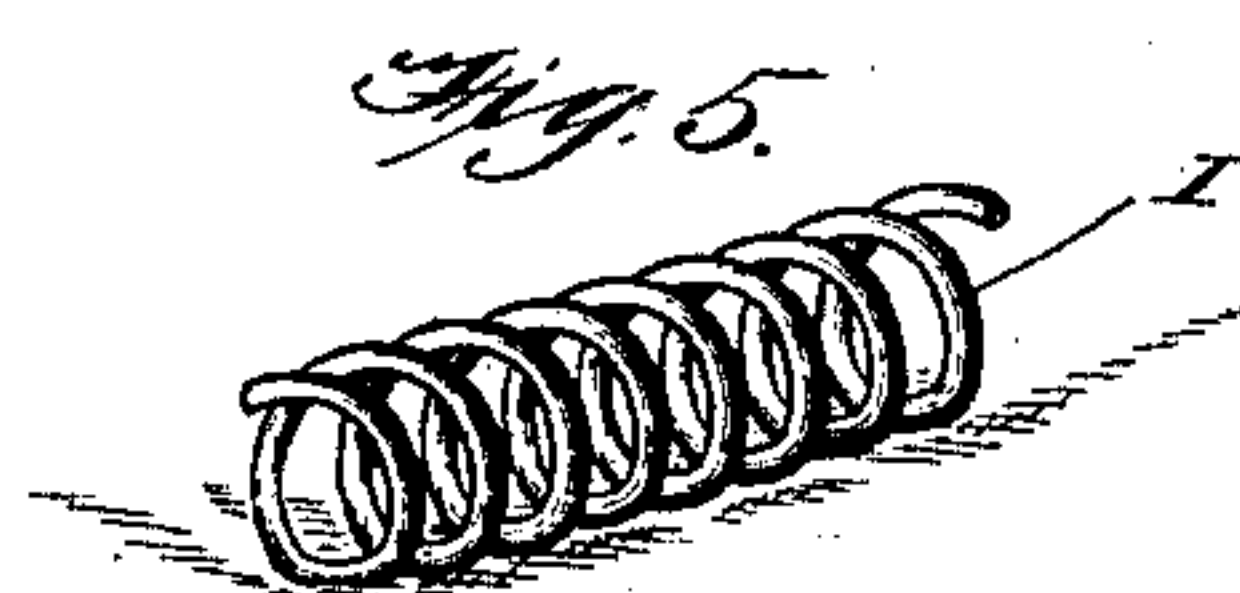
J. P. MARSHALL.
WASHBOARD.

(Application filed Dec. 2, 1899.)

(No Model.)



Witnesses
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660701 660708 after 660713

UNITED STATES PATENT OFFICE.

JAMES P. MARSHALL, OF INDEPENDENCE, MISSOURI.

WASHBOARD.

SPECIFICATION forming part of Letters Patent No. 660,708, dated October 30, 1900.

Application filed December 2, 1899. Serial No. 738,991. (No model.)

To all whom it may concern:

Be it known that I, JAMES P. MARSHALL, a citizen of the United States, residing at Independence, in the county of Jackson and State of Missouri, have invented a new and useful Washboard, of which the following is a specification.

My invention relates generally to washboards, and more particularly to the construction of one of the faces of the same, the object being to provide a spring-wire rubbing-surface which shall be exceedingly cheap and simple, easily arranged, and one which will prove effective without injuring the clothes in any manner whatever; and with these objects in view my invention consists, essentially, in arranging the series of spirally-coiled wires within and upon the grooved faces of the base-board in a manner herein-
after explained.

The invention consists also in certain details of construction and novelties of combination, all of which will be fully described hereinafter, and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a face view of the washboard constructed in accordance with my invention. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a perspective view showing the manner of introducing the spirally-coiled wires into the base-board. Fig. 4 is a transverse vertical section on the line 4 4 of Fig. 1, and Fig. 5 is an enlarged detail view of a portion of one of the coils.

In the practical embodiment of my invention I employ the usual form of side bars A, top bar B, and cross-piece C, connected by a longitudinal strip D, thereby providing suitable spaces on either side for the reception of soap. The side bars A are also connected adjacent to their lower ends by the cross-strip E. Between the cross-strips C and E and the side bars A the base-board F is secured, having the usual corrugated metal sheet G ar-

anged upon one face. The opposite face of the base-board has a series of parallel horizontal grooves H produced therein, which extend across the entire width of the base-board. These grooves are intended to receive the portions of coils of the spirally-coiled wires I, which are arranged in parallel series, the coils being forced down into the grooves and the ends of the coils forced into the upper and lower grooves, thereby preventing any exposed ends. The wire is first coiled, as shown in Fig. 5, and one end inserted either in the bottom or top groove, and then the following coils can be easily inserted or forced into the grooves in regular order, as most clearly shown in Fig. 3. When all of the coil-wires have been seated in place, as shown in Fig. 1, it will be seen that I provide the rubbing-surface in which the coils will extend both vertically and horizontally and likewise diagonally in both directions.

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

1. In a washboard, the combination with a transversely-grooved base-board, of parallel series of coiled wires secured therein, the coils being arranged transversely of the grooves with the bottom of each coil of each wire in a different groove and the top projecting beyond the surface of the board.

2. The combination with the base-board having the series of horizontal grooves produced in one face of the spirally-coiled wires, having portions of their coils seated in the grooves, the ends of said wires being located in the top and bottom grooves respectively, said wire coils being arranged side by side in vertical series, substantially as shown and described.

JAMES P. MARSHALL.

Witnesses:

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