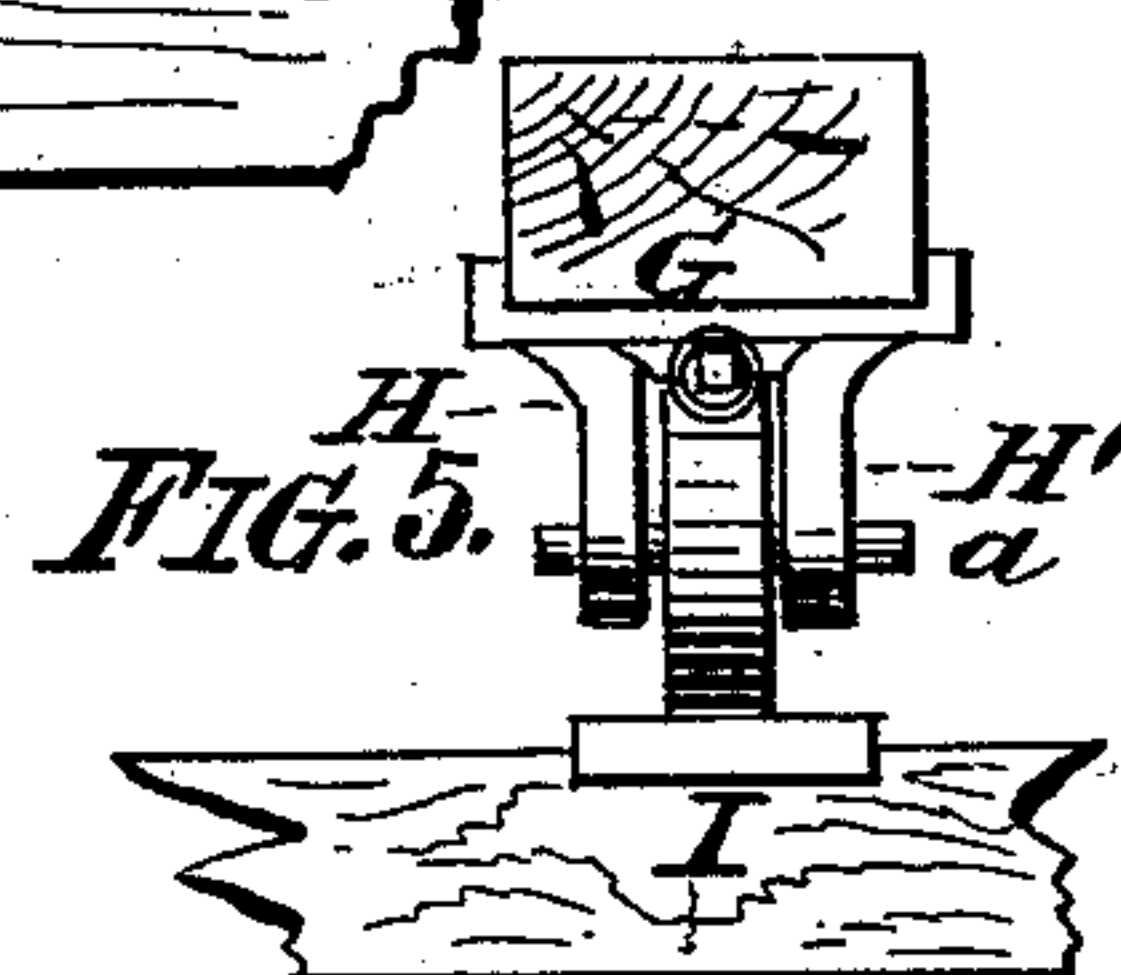
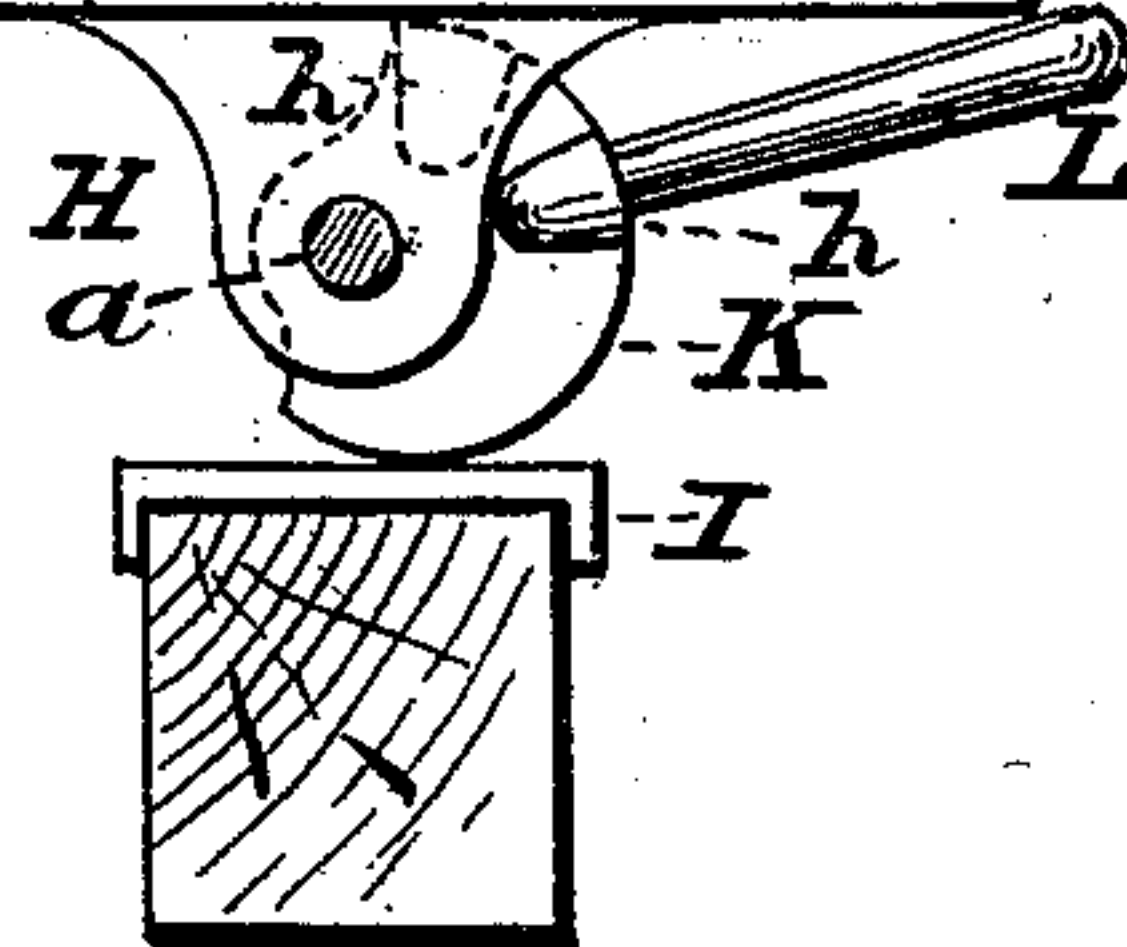
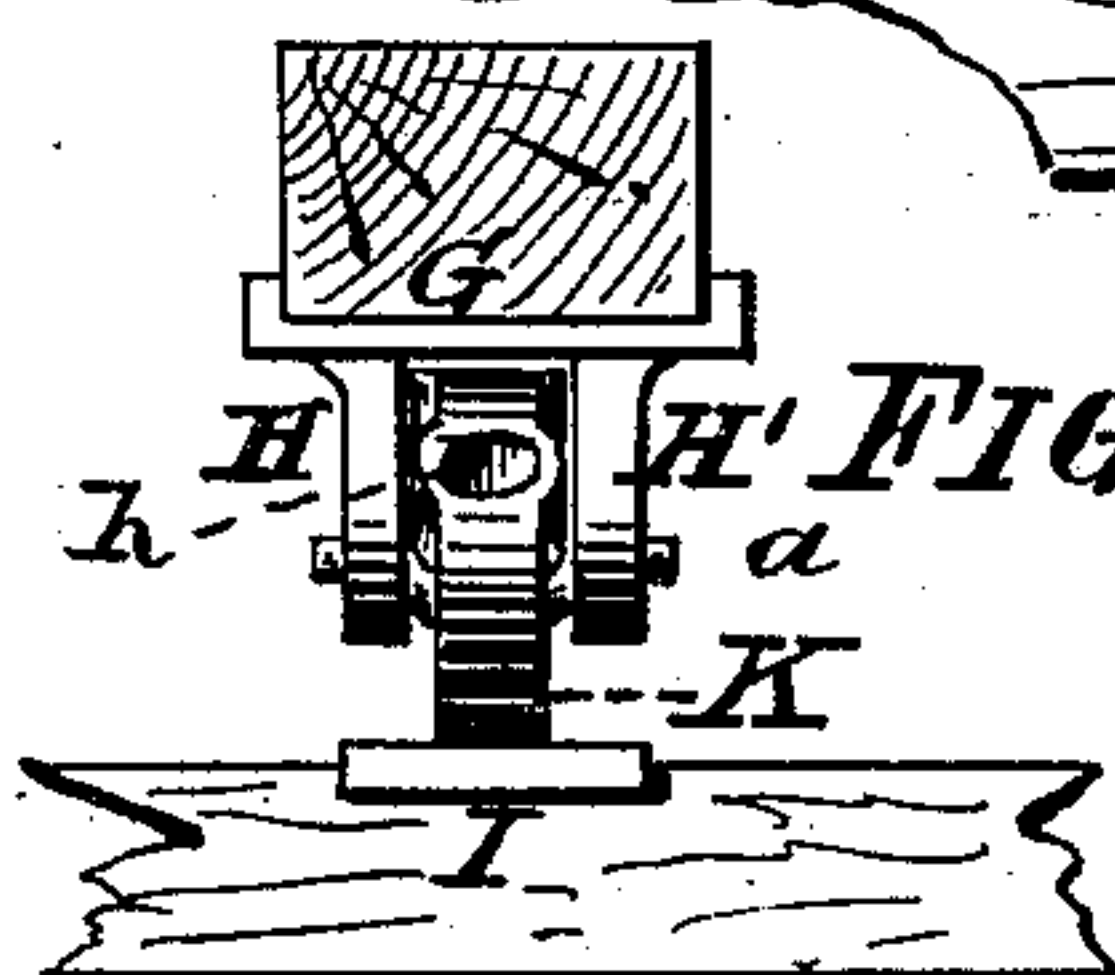
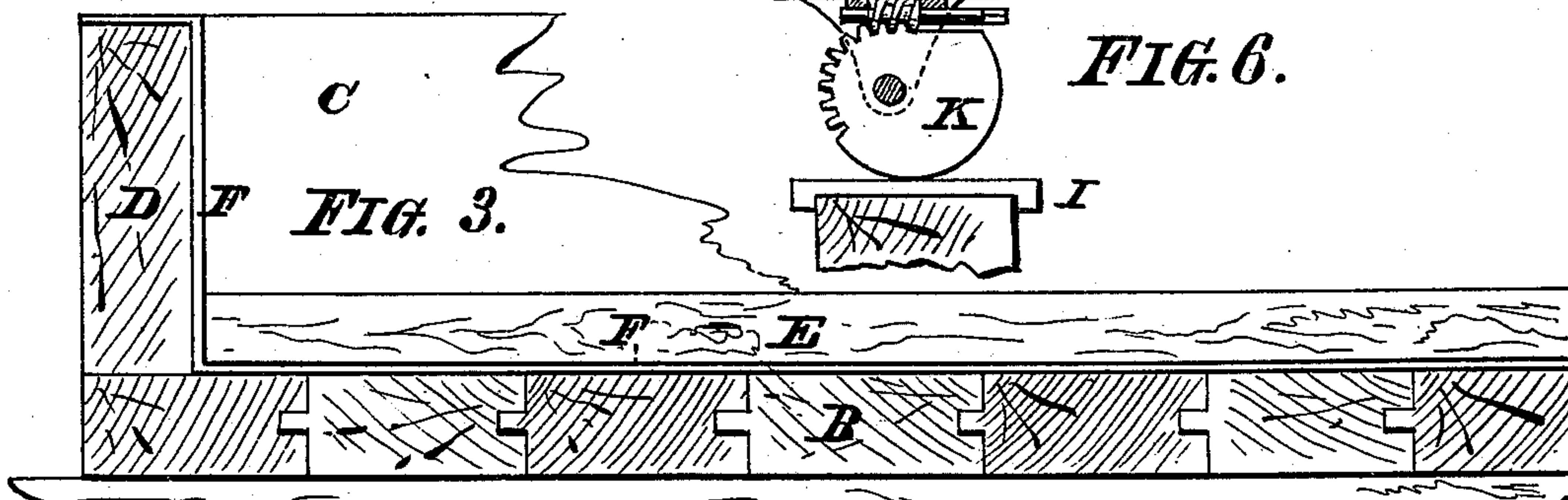
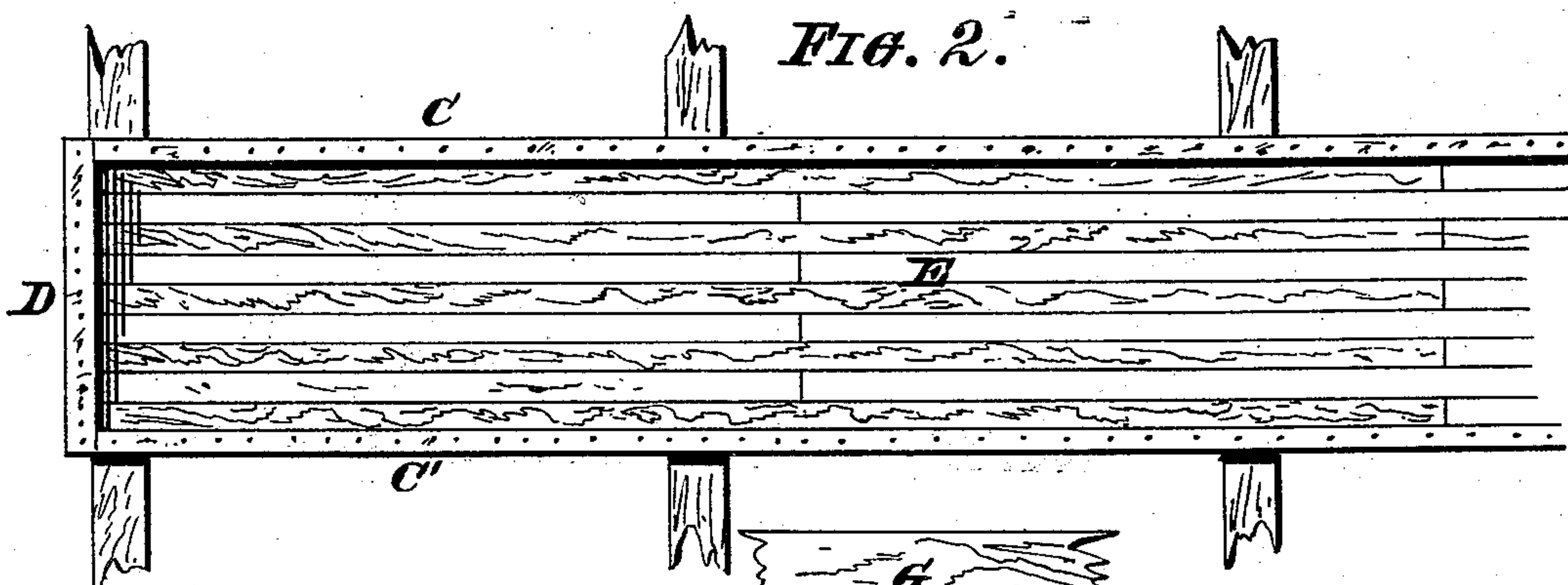
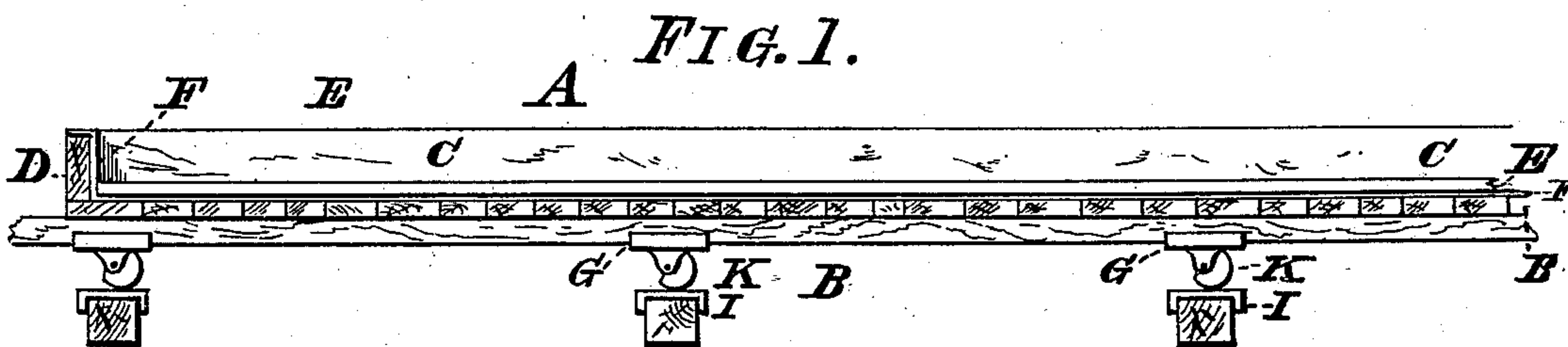


(No Model.)

M. J. STARK.
STARCH TABLE.

No. 254,063.

Patented Feb. 21, 1882.



Witnesses:

M. Stark
Willie C. Stark

Inventor:

Michael Stark

UNITED STATES PATENT OFFICE.

MICHAEL J. STARK, OF BUFFALO, NEW YORK, ASSIGNOR TO WESP, LAUTZ BROTHERS & CO., OF SAME PLACE.

STARCH-TABLE.

SPECIFICATION forming part of Letters Patent No. 254,063, dated February 21, 1882.

Application filed December 6, 1881. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL J. STARK, of Buffalo, in the county of Erie and State of New York, have invented certain new and useful
5 Improvements on Starch-Tables; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will
10 enable others skilled in the art to which it appertains to make and use the same.

My present invention has general reference to starch-tables; and it consists essentially in such novel combination of parts and details of
15 construction as are hereinafter first fully set forth and described, and then pointed out in the claims.

The object of my present invention is the production of a starch-table that shall be durable in construction, readily adjusted, and easily
20 kept in proper repair. To attain this end I construct my starch-table as illustrated in the accompanying drawings, already referred to, in which—

25 Figure 1 is a sectional elevation, and Fig. 2 a plan, of my improved starch-table. Fig. 3 is a sectional elevation on a larger scale. Figs. 4 and 5 are end views of the adjusting device, and Fig. 6 a sectional elevation of the same.

30 Like parts are designated by corresponding letters of reference in all the figures.

In these drawings, the letter A represents a starch-table, such as are used in starch, glucose, and other factories. This table is composed of a bottom, B, side pieces, C C', and an
35 end piece, D, all constructed in the usual manner. The upper surface of this bottom B, as well as the inner sides of the side pieces, C C', are provided with a metallic sheeting, E, whereby the gutter formed by the bottom and
40 side pieces is rendered water-tight, and at the same time prevented from speedy decay.

As heretofore constructed, the metallic sheeting is placed into the gutter or tables
45 to present a smooth and level surface to the liquid holding the starch in suspension, and thereby to cause the deposition of said starch upon the tables without also retaining the gluten and other foreign matter, which will take
50 place to a greater or lesser extent when eddies and other undulations are found in the bot-

tom of the tables; but owing to the fact that sheet metal is never perfectly flat, but always more or less bulged, it is impossible to line these tables with metal in such manner as to
55 produce a perfectly level surface. To overcome this objection I place into the tables, upon the bottom sheeting, an auxiliary bottom, F, of preferably matched stuff, running the boards longitudinally, (by preference,) as clearly shown
60 in Fig. 2. This auxiliary bottom, after being placed into the tables and securely fastened therein in any suitable manner, I then proceed to paint, coat, or saturate with some substance or material that will render the same
65 more or less water-proof, so as to perfectly fill the pores of the wood, and thereby to prevent moisture, particles of starch, &c., from entering the same. I prefer to use as a medium to accomplish this result paraffine, which is, if at
70 all, but slightly affected by the alkaline solution flowing over the tables. It is, furthermore, perfectly inodorous and tasteless, and comparatively cheap. The effect of thus saturating or coating the auxiliary bottom is that the
75 fibers of the wood are perfectly united and bound together, that they are impervious to water, and therefore prevent particles of starch from lodging in the pores and afterward fermenting, and that if for some reason or an-
80 other the auxiliary bottom should become uneven, even to the slightest degree only, it can in a very short time be brought to a perfectly level surface by planing, scraping, or other analogous operation.

85 Owing to the fact that the pores of the wooden auxiliary bottom are filled and the fibers bound together by the application of paraffine or analogous substances, the said bottom is not liable to "splinter" when the starch is shoveled away
90 from the tables, and thereby overcomes another great and serious objection to the wooden tables now in use.

It being essential that the bottom of the tables form a perfect plane, it is obvious that
95 the tables should be kept in such a condition. Owing to the fact that in buildings where starch, &c., is manufactured the weight or load upon the several floors is always varying and fluctuating, because large tanks or vats are some-
100 times filled and at other times empty, it is necessary to provide the tables with means for

raising and lowering them. These means should be so constructed as to be readily and quickly operated, and to attain these results I provide the metallic bearing-pieces G with lugs H H', and pivot within these lugs a cam-shaped disk, K, resting with its perimeter upon base-plates I. This disk I provide with sockets h, into which I insert a rod or handle, L, by means of which I can rotate said cam-disk around its pivot a.

It will now be readily observed that by revolving the cam-disk in one or the other direction I can increase or decrease the space between the base and bearing or carrying plates, and thereby raise and lower the table in a very convenient manner. It will be further observed that adjustment can be made in a very short space of time, since a quarter-revolution of said disk will cause a difference in the height of the tables of one inch, (more or less,) according to the throw of the cam-disk.

Instead of operating the cam-disk with a hand-rod I may revolve the same by means of a worm and a section of a worm-wheel formed on the cam-disk, as illustrated in Fig. 6. I prefer, however, the device shown in Figs. 1 and 3, owing to its greater simplicity, cheapness, and quickness in action.

Having thus fully described my invention, I claim as new, and desire to secure by Letters Patent of the United States—

1. A starch-table composed of a bottom, B, sides C C', end pieces, D, and an auxiliary bot-

tom, E, placed above the true bottom B, substantially as described, for the objects specified. 35

2. A starch-table composed of a bottom, B, sides C C', end pieces, D, lining or sheeting F, and an auxiliary bottom, E, placed above the lining F and bottom B, substantially as and for the object stated. 40

3. In starch-tables, an auxiliary bottom, E, placed upon the true bottom B, substantially as described.

4. In starch-tables, a device for instantly raising and lowering, consisting, in combination with the bottom B, of plates G, having lugs H H', a cam-disk, K, provided with means, substantially as described, for rotating said disk, and a base-plate, I, substantially in the manner as and for the object specified. 50

5. The improved starch-table hereinbefore described, consisting of a bottom, B, sides C C', end piece, D, lining or sheeting F, an auxiliary bottom, E, saturated or coated with material, substantially as described, and means whereby the said table can be raised and lowered, the whole being constructed for operation substantially in the manner as and for the use and purpose stated.

In testimony that I claim the foregoing as my invention I have hereto set my hand in the presence of two subscribing witnesses. 60

MICHAEL J. STARK.

Attest:

WILLIE C. STARK,
JOHN C. DUERR.