

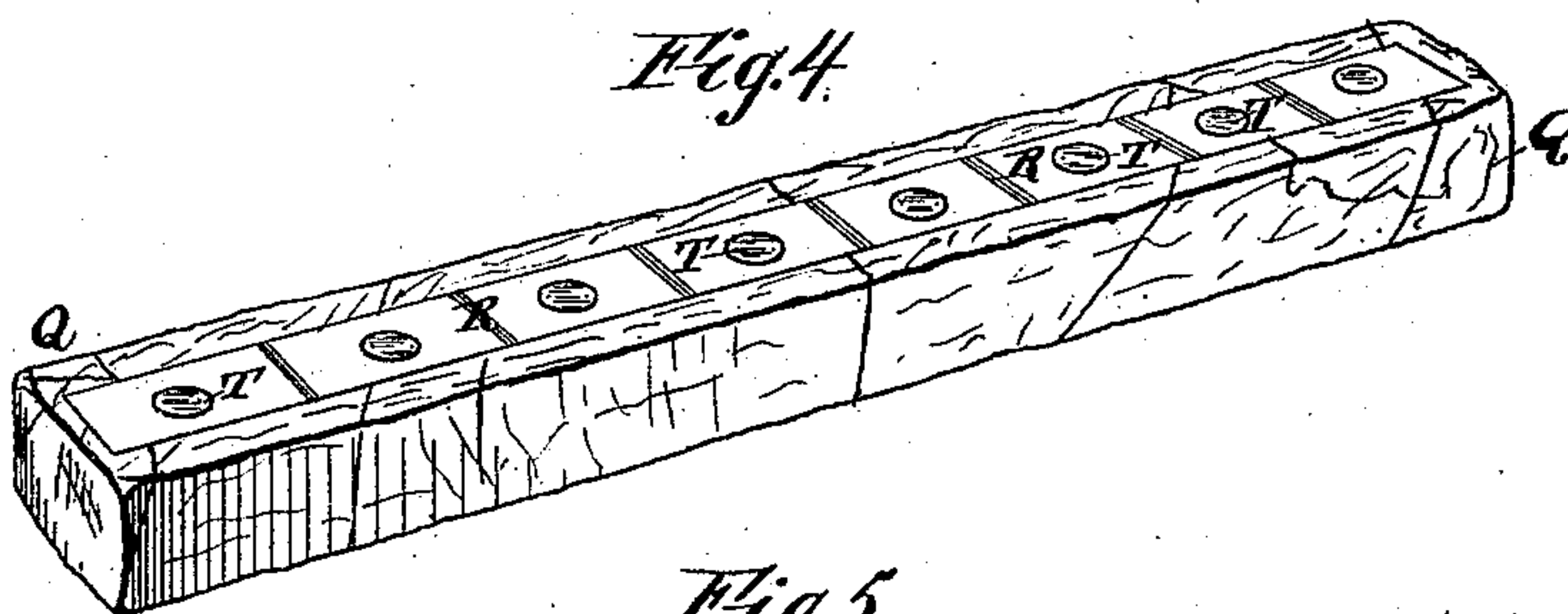
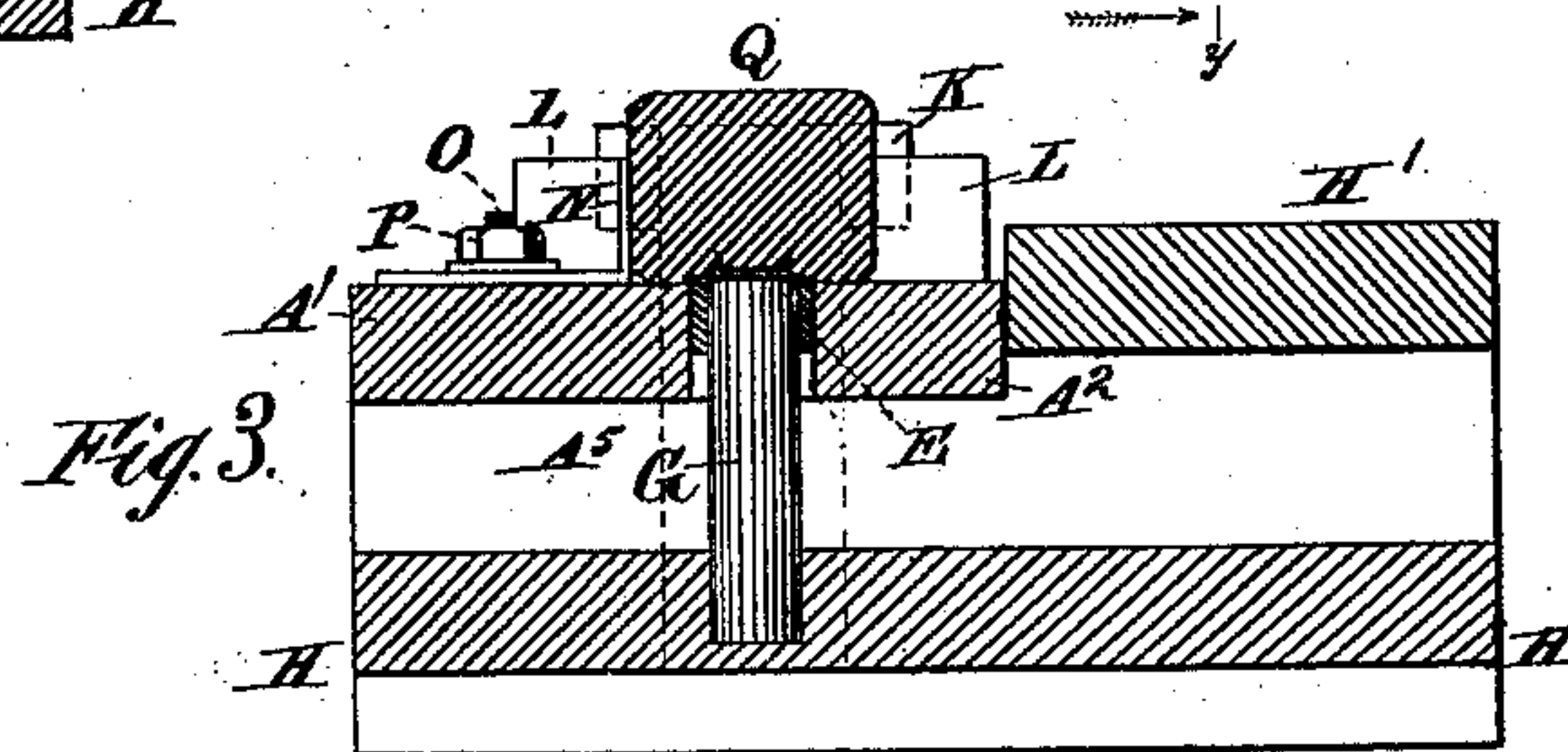
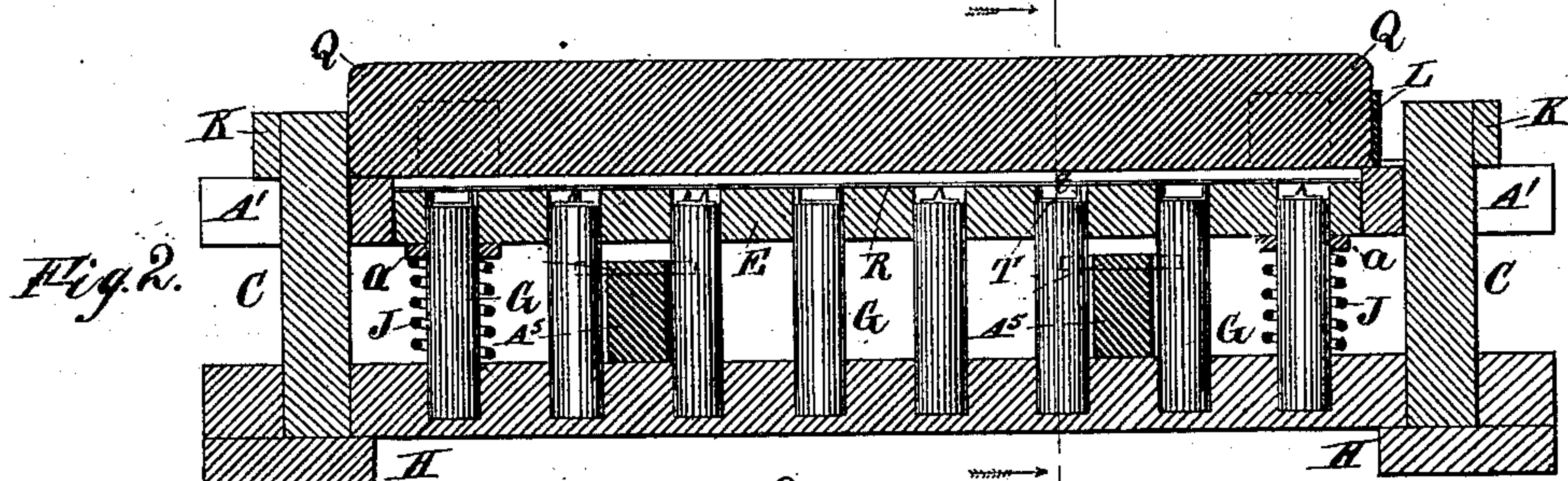
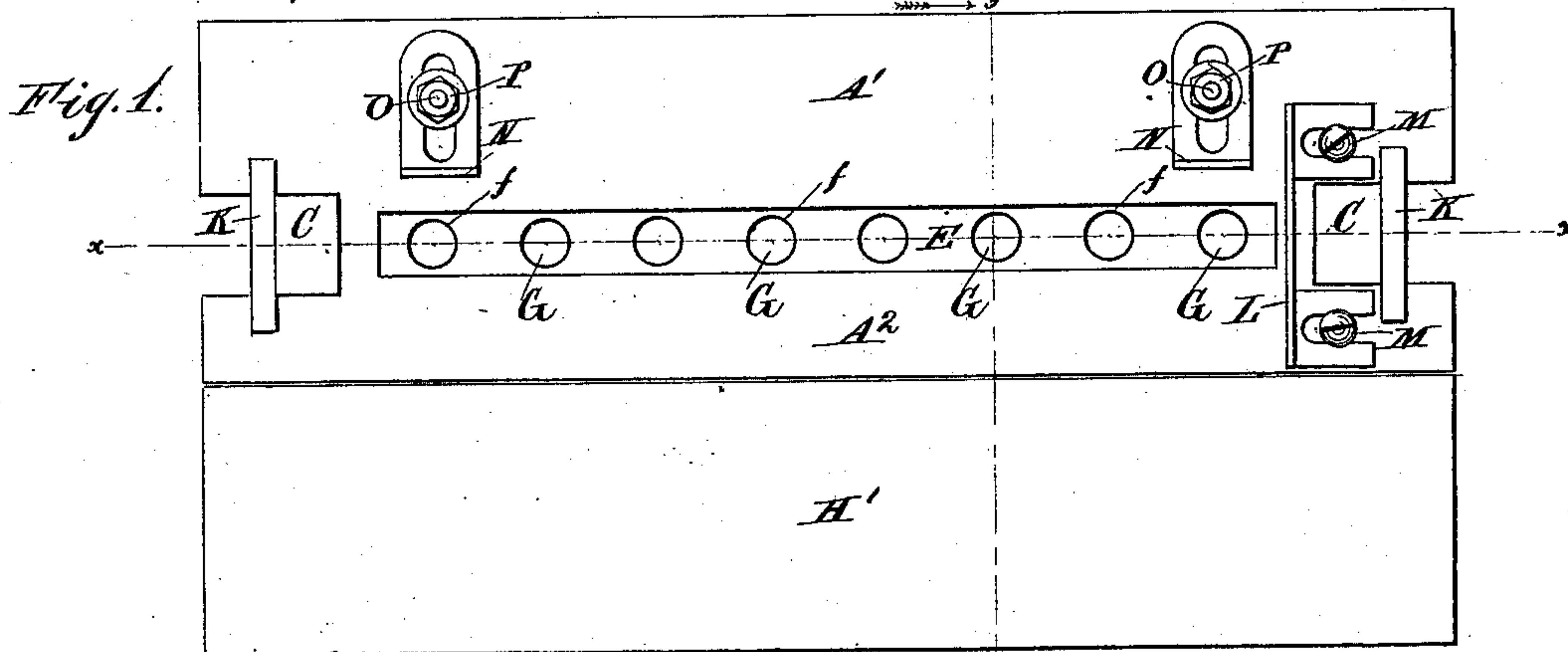
(No Model.)

N. B. HEATT & E. R. HEARN.

MACHINE FOR ATTACHING TAGS AND LABELS TO PLUG TOBACCO.

No. 299,541.

Patented June 3, 1884.



WITNESSES
Charles R. Searle,
B. E. Stafford.



INVENTORS
N. B. Heatt
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by their attorney
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UNITED STATES PATENT OFFICE.

NAPOLEON B. HEATT AND EDWIN R. HEARN, OF JERSEY CITY, NEW JERSEY,
ASSIGNORS TO P. LORILLARD & CO., OF SAME PLACE.

MACHINE FOR ATTACHING TAGS AND LABELS TO PLUG-TOBACCO.

SPECIFICATION forming part of Letters Patent No. 299,541, dated June 3, 1884.

Application filed August 9, 1881. (No model.)

To all whom it may concern:

Be it known that we, N. B. HEATT and E. R. HEARN, both of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements Relating to Machines for Attaching Tags and Labels to Plug-Tobacco, of which the following is a specification.

Our improved machine allows the attachment of tin tags and strips of paper commonly used with them to plugs of tobacco with great rapidity and perfection. We employ a platform provided with suitable gages, upon which the plugs of tobacco are successively placed to receive the tin tags and the paper. The platform is loosely formed with a long slot, in which is inclosed a separate strip of wood or other suitable material with apertures of the same shape as the tags and but little larger, into which apertures a series of fixed vertical posts are received from below. When the machine is idle, the upper ends of the posts are a little lower than the loose strip, and the loose strip is a little lower than the upper surface of the platform. The tags are placed upon the upper end surfaces of the posts, with the prongs projecting upward. The strips of paper are placed upon the loose strip with what is to be its exterior face downward, and the plug of tobacco is placed upon the platform. The machine is operated to bring the tops of the posts and the loose piece flush with each other and with the surfaces of the platform, the tobacco being held firmly in contact therewith. By this means the claws of the tags are pressed through the paper into the tobacco, and the paper, being previously prepared on the upper face with gum or paste, is strongly cemented to the tobacco.

So far as yet described, the invention is set forth in an application for patent made by one of us, E. R. Hearn, filed simultaneously herewith. We have simplified the construction and working of the machine. Our improved machine requires no treadle, but is operated by the hands of the attendant. No cross-bar or abutment is required over the tobacco. The plugs of tobacco are successively applied in position against the gages and are depressed by the direct action of the hands. The plat-

form and loose perforated strip are depressed upon the posts, which latter are stationary.

The accompanying drawings form a part of this specification, and represent what we consider the best means of carrying out the invention.

Figure 1 is a plan view. Fig. 2 is a vertical section on the line xx in Fig. 1. This shows the condition before the parts are operated to attach the tags and label to the tobacco. Fig. 3 is a vertical section on the line yy in Figs. 1 and 2. This figure shows the condition after the parts have operated by the depression of the tobacco and its supporting-platform and loose strip, so that both the tags and the label are pressed firmly into and united with the tobacco. Fig. 4 is a perspective view of a plug of tobacco after it has been labeled and tagged. Fig. 5 is a perspective view of one of the tags.

Similar letters of reference indicate like parts in all the figures.

H is the fixed frame-work. We employ a vertically-sliding platform, $A' A^2$, with a considerable longitudinal slot or aperture, in which is loosely inclosed a strip, E , with a series of equidistant perforations or apertures, f , which are spaced according to the desired size of a subdivision of the plug of tobacco. This strip rests on transverse supports fixed to and forming a portion of the vertically-sliding platform. A series of equidistant uprights or vertical posts, $G G$, are strongly supported on the fixed base H , being spaced the same as the apertures f and inclosed loosely therein. Spiral springs J , abutting against the fixed base H , press upward against the transverse strips a , holding them and the attached parts $A' A^2$, constituting the platform, gently up against fixed stops $K K$ on the uprights $C C$. The strip E is of less thickness than the parts $A' A^2$, and by resting on the supports a the top of the strip E is sufficiently below the adjacent surfaces of $A' A^2$, so that the paper label of corresponding width, on being dropped thereon, is certain to lie in the correct position. When the platform $A' A^2$, with its cross pieces or supports a , is depressed by the action of the operator pressing downward on a plug of tobacco properly ap-

plied in the position shown, the upper face of the strip E is flush with the tops of the posts G. The parts are so arranged and proportioned that the upper ends of the posts G will be a short distance below the upper surface of the perforated piece E *f* and the latter will be a little below the upper surface of the platform A' A² when the latter is pressed up against the stops K K and the parts are at rest, as is shown in Fig. 2.

A⁵ A⁵ are stops mounted on the fixed framework, and arranged to arrest the descent of the platform A' A². These stops bring the upper surface of the strip E flush or even with the platform when its descent is finally arrested, and insures the firm pressure of the whole against the tobacco. An end gage, L, adjustable on the platform A' A², is attached thereto by screws M, standing in open slots, as shown. Back gages, N N, are held in the back portion, A², of the platform by the screws O and nuts P. These gages N can be so adjusted that the longitudinal center line of a plug of tobacco will be exactly over the longitudinal center line of the strip E—that is to say, if it is adjusted for a piece of tobacco of certain width, the other pieces of the same width need only be placed against the gages N, and their longitudinal central line will coincide with that of the perforated strip E. The tin tags may be round, square, or of any other desired form. Each is provided with two upturned prongs or jaws, *t*.

Q represents the piece of plug-tobacco to which the tags are to be attached, and R a strip of paper or other suitable material which is to be placed upon the plug of tobacco and held with the tags. A table or board, H', is held stationary on the frame-work on the same level with the platform A' A² when the latter is in its highest position.

The operation is as follows: The tin tags are placed by hand or otherwise in the recesses formed by the apertures *f*, each resting on the top of a post, G, with the prongs *t* extending upward. A strip, R, of gilt or otherwise prepared paper, is then placed upon the perforated strip E, which being sunk a little below the platform A' A², the paper is guided by the latter and is assured of being held in the correct position. The paper is placed with its face side downward, the back side, which is upward, having being previously coated with gum-arabic or other suitable adhesive material. The plug of tobacco Q is placed on the platform A' A², resting against the back gages, N N, and the end gage, L. Now the piece of plug-tobacco is pressed downward by hand or by any suitable machinery, the platform A' A² moving with it. As it sinks, the perforated piece E sinks also until its upper surface is flush with the upper surface of the posts G. Then it is arrested by the stops A⁵, and is strongly held up thereby even with the posts.

The platform A' A², and consequently the tobacco, continuing to be depressed, the piece of tobacco will rest firmly on the posts G and on the strip E; but before this the prongs *t* of the tin tags have been forced through the strip of paper R into the tobacco, and finally both the tin tags and the paper are pressed firmly against the tobacco and caused to adhere thereto.

Modifications may be made in many of the details. The number of the posts G and apertures *f* may be varied. The dimensions of the parts may be changed within wide limits. We prefer to moisten the strip of paper R, and thus to prepare the adhesive coating to adhere at once to the tobacco. If this is imperfectly performed or neglected altogether, the dampness of the tobacco will ultimately soften the adhesive matter and cause the paper to adhere after the several plugs of tobacco have been strongly pressed together in the packing-boxes. The upper surface of the strip E may be faced with rubber, felt, or analogous yielding material, if desired, in order to press the paper R more uniformly against irregularly-surfaced or "rough-and-ready" tobacco. Parts of the invention may be used without the whole. For tobacco of uniform size the end gage, L, and the back gages, N N, may be fixed. Instead of two back gages, N, a greater number may be employed and adjusted in a straight line; or a single strip extending the whole length of the plug may be made to serve.

We claim as our invention—

1. In a machine for attaching tin tags to plug-tobacco, the combination, with the vertically-sliding platform A' A², of the independent and removable strip E, provided with apertures *f*, and of the posts or uprights G below the strip E, substantially as herein shown and described, and for the purpose set forth.

2. In a machine for attaching tin tags to plug-tobacco, the combination, with the vertically-sliding platform A' A², of the apertured independent and removable strip E, the posts or uprights G, the springs J, and the stops K, substantially as herein shown and described, and for the purpose set forth.

3. In a machine for attaching tin tags to plug-tobacco, the combination, with the platform A' A², of the apertured strip E, the posts G, and the adjustable gages L and N, substantially as herein shown and described, and for the purpose set forth.

In testimony whereof we have hereunto set our hands, at New York city, United States of America, this 8th day of August, 1881, in the presence of two subscribing witnesses.

N. B. HEATT.

EDWIN R. HEARN.

Witnesses:

CHARLES CAREY STETSON,
M. F. BOYLE.