

(No Model.)

W. P. CANNING.

DEVICE FOR SUPPORTING AND ADJUSTING SCREENS OR UNDERCASINGS
FOR THE CYLINDERS OR ROLLERS OF CARDING ENGINES.

No. 485,679.

Patented Nov. 8, 1892.

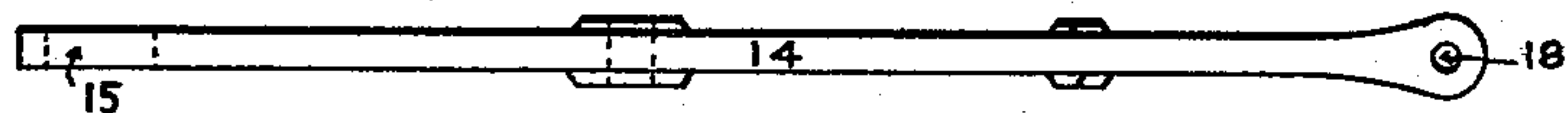


FIG. 4.

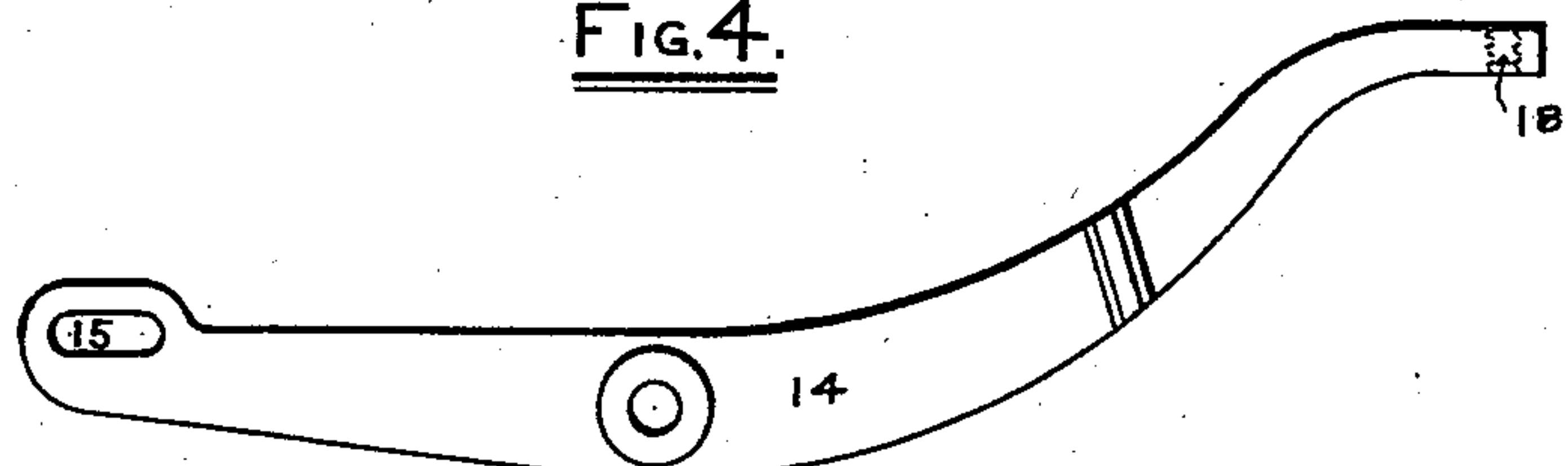


FIG. 3.

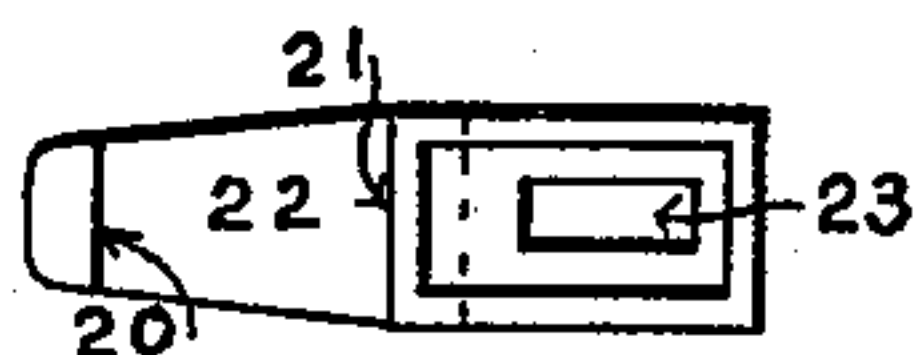


FIG. 9.



FIG. 8.

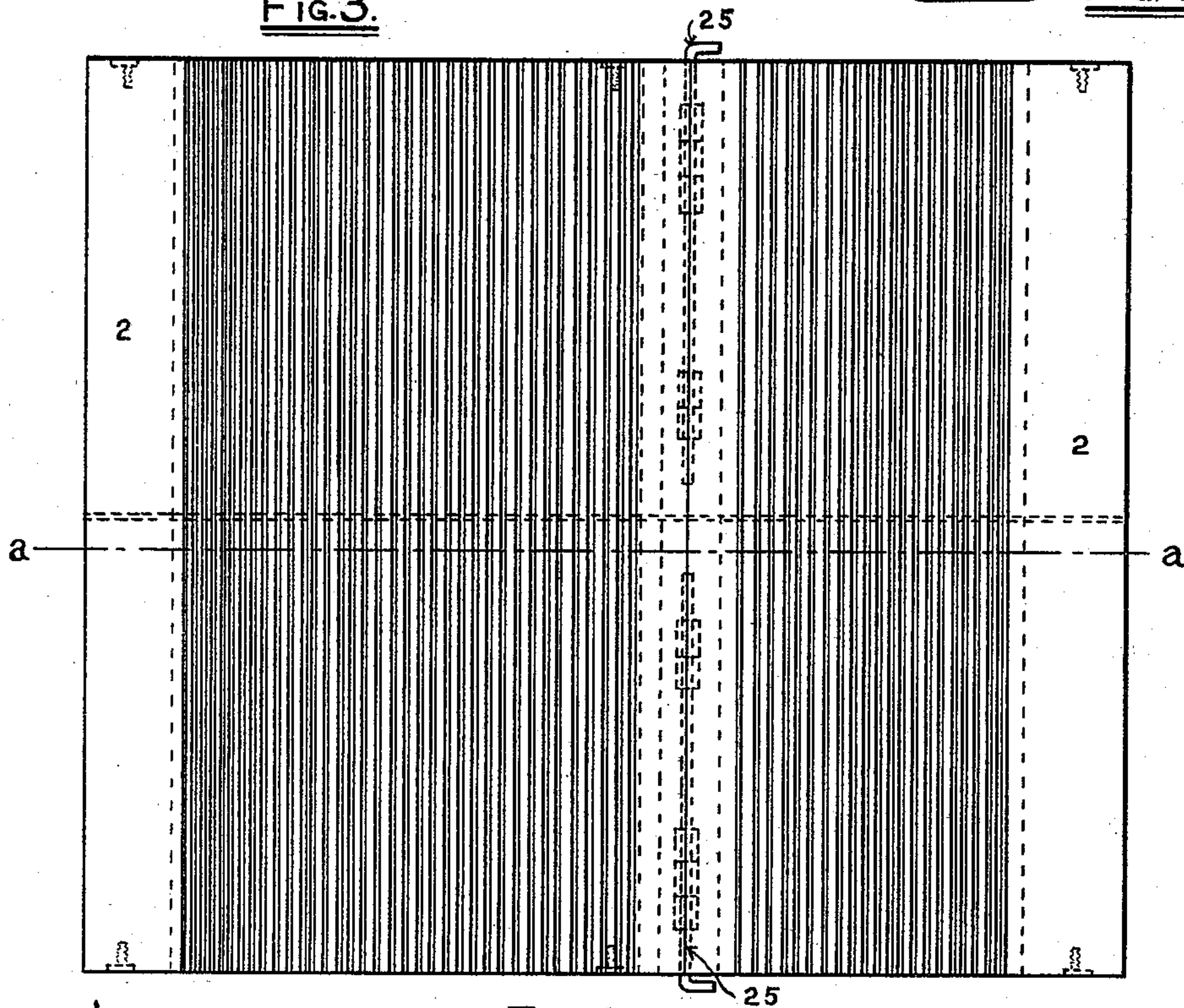


FIG. 1.

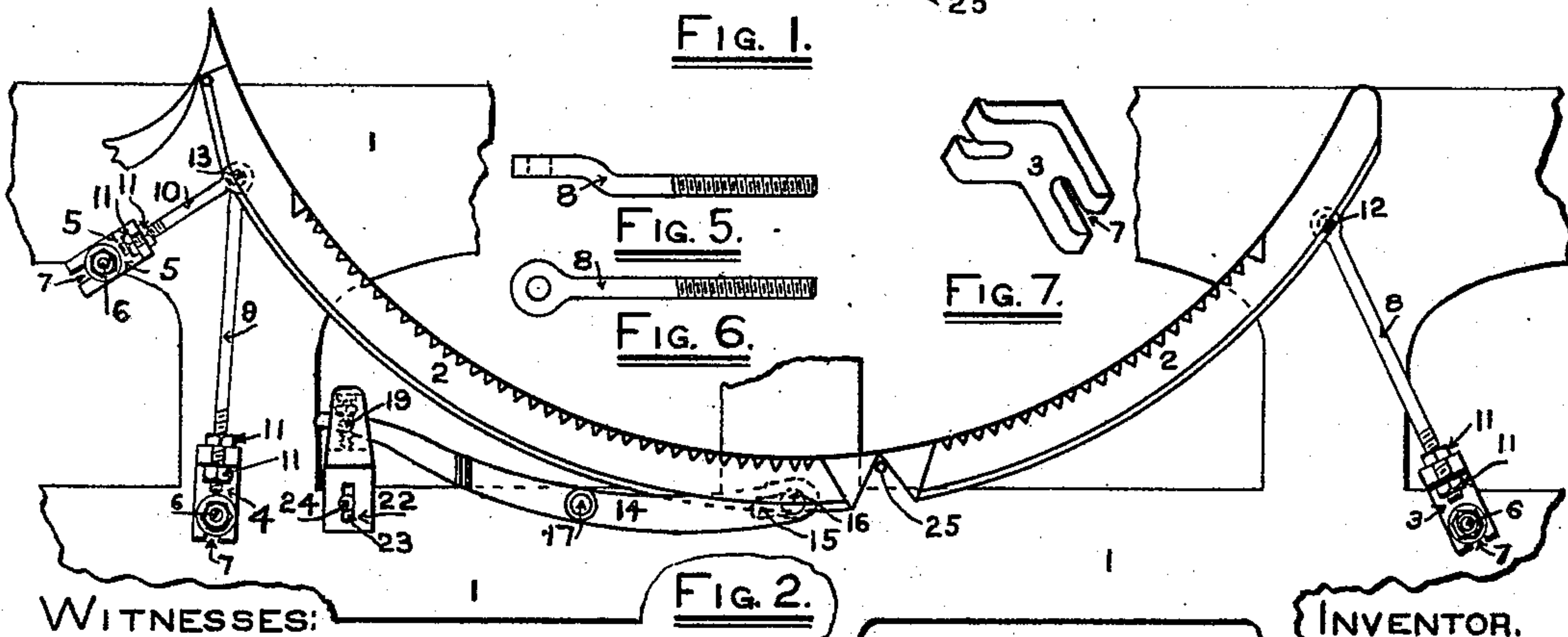


FIG. 5.

FIG. 6.

FIG. 7.

WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM PITT CANNING, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO THE
LOWELL MACHINE SHOP, OF SAME PLACE.

DEVICE FOR SUPPORTING AND ADJUSTING SCREENS OR UNDERCASINGS FOR THE CYLINDERS OR ROLLERS
OF CARDING-ENGINES.

SPECIFICATION forming part of Letters Patent No. 485,679, dated November 8, 1892.

Application filed July 1, 1892. Serial No. 438,731. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM PITT CANNING, a citizen of the United States, residing at Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Devices for Supporting and Adjusting Screens or Undercasings for the Cylinders or Rollers of Carding-Engines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to carding-engines, and in particular to the undercasings or screens and the adjusting devices therefor which are employed in connection with the cylinders or rollers of such machines.

My invention consists, mainly, in the combination, with an undercasing or screen of a carding-engine—for example, the main-cylinder undercasing or screen—of certain devices whereby the position of the undercasing or screen may be adjusted relatively to the cylinder or roller with which it co-operates, all substantially as shown in the accompanying drawings and described in the following specification, and as particularly pointed out and defined in the claims at the close of the specification.

In the accompanying drawings, Figure 1 is a plan view of the undercasing or screen of the main cylinder of a carding-engine; and Fig. 2 is a view of one of the side frames of a carding-engine, an undercasing or screen, and adjusting devices embodying my invention, the undercasing being in section on the line *a a* in Fig. 1. Figs. 3 and 4 are side and edge views, respectively, of the adjusting-lever shown in Fig. 2. Figs. 5 and 6 are views, taken at right angles to each other, of one of the eyebolts or hangers which I employ in connection with the undercasing for the purpose of supporting the latter and adjusting its position. Fig. 7 is a perspective of one of the adjustable stands, which are shown in Fig. 2 applied to the side framing of a card. Figs. 8 and 9 are views, taken at right angles to each other, of the adjustable stand, which is provided with bearings for the ends of the screw passing through the adjusting-lever shown in Fig. 2.

At 1 1 are portions of one side framing of a carding-engine, and at 2 is a screen or undercasing. At 3, 4, and 5 are stands, which are adjustably secured to the side framing 1 by bolts or screws 6, passing through slots 7 in the feet or portions of said stands, which are applied to the side framing. At 8, 9, and 10 are eyebolts or hangers, the eye ends whereof engage with pins on the undercasing, while the threaded ends thereof pass through slots in the laterally-projecting portions of the stands 3, 4, and 5, respectively, and receive thereon nuts 11 above and below the said portions of said stands, which nuts may be turned as desired and as may be required in moving the eyebolts or hangers endwise for the purpose of adjusting the undercasing. The eyebolt or hanger 8 at the right-hand side of the undercasing in Fig. 2 has the eye thereof engaged with a pin 12, projecting from the undercasing at a point adjacent to the right-hand edge thereof, and the said eyebolt or hanger is arranged so as to be radial, or approximately so, to the cylinder or roller adjacent to which the undercasing is placed. The eyebolts or hangers 9 and 10 at the left-hand side of Fig. 2 both have the eye portions thereof engaged with the pin 13, projecting from the undercasing. The eyebolt or hanger 9 is vertical, or approximately so, while the eyebolt or hanger 10 is arranged so as to be radial, or approximately so, to the cylinder or roller adjacent to which the undercasing is placed. I support the undercasing between the points at which the eyebolts or hangers 8, 9, and 10 are connected therewith by means of a lever 14. The said lever 14 has one end thereof slotted longitudinally, as at 15, and through the slot passes a pin or the like device 16, projecting from the end of the undercasing. The lever 14 is pivoted at 17, and in the other end thereof is formed a screw-threaded hole 18, into which is turned a screw 19, the ends whereof will usually project on opposite sides of the end of the lever. The said end of the lever is placed between the shoulders or bearing-surfaces 20 21 of the stand 22, and preferably the opposite ends of the screw 19 will both take bearing against the shoulders 20 21. The foot of the stand 22

is slotted, as at 23, for the passage of the screw 24, by which it is adjustably secured to the side framing 1. The lever 14 and connected parts enable me to support the undercasing at an intermediate point between the eyebolt or hanger 8 and the eyebolts or hangers 9 and 10, and the setting and adjusting devices employed, as shown, in connection with the said lever enable me to accurately adjust the intermediate portion of the undercasing relatively to the surface of the cylinder or roller adjacent to which the undercasing is placed. The use of the lever 14 is necessitated by the desire to mount the main cylinder of the carding-engine in bearings which are as low as possible on the side framings of the machine.

In carding-engines having the main cylinder mounted as low as in those now built by me there is not sufficient room below the middle portion of the undercasing to permit of the use of eyebolts or hangers, such as 8, 9, and 10, and the stands with which the latter are connected. Moreover, were similarly-disposed eyebolts or hangers to be employed at the intermediate points in a carding-engine having the main cylinder bearings located at a convenient height above the side framings the adjusting devices for the eyebolts or hangers still would have to be so disposed as to render them practically inaccessible. The use of a lever 14, disposed substantially as indicated in the drawings and having an arm thereof extended into the wider space existing adjacent to the rear edge of the undercasing, enables me to provide proper support for the undercasing even in a carding-engine in which the main cylinder is set so low as that the under side of the undercasing comes into very close proximity to the floor, and enables me to place the setting or adjusting devices where they may be conveniently reached and manipulated. For the purpose of facilitating the adjustment of the undercasing relatively to the surface of the cylinder or roller adjacent to which it is placed I prefer to construct the said undercasing in two sections

and to hinge them together, as at 25. By having the undercasing in two pieces thus hinged together I am enabled to adjust the right-hand section toward or from the cylinder or roller without affecting the adjustment of the other section.

In the drawings I have shown only the supporting and adjusting devices which are employed at one end of the undercasing or screen. It is to be understood that like devices are to be employed in practice at the opposite end thereof.

I claim as my invention—

1. The combination, with an undercasing, of a lever in operative connection therewith and an adjusting-screw whereby to move the lever and set the undercasing, substantially as described.

2. The combination, with an undercasing, of hangers and adjusting devices therefor at the front and rear sides of the said undercasing, a lever in operative connection with the said undercasing intermediate the said hangers, and a screw whereby to move the lever in setting the undercasing, substantially as described.

3. The combination, with an undercasing made in sections and hinged together, of hangers connected with the undercasing and provided with adjusting devices, as described, a lever in operative connection with the undercasing intermediate the hangers, and a screw whereby to move the lever in setting the undercasing, substantially as described.

4. The combination, with the undercasing, of a lever in operative connection therewith, an adjusting-screw passing through a threaded opening in the said lever, and a stand having bearings for the opposite ends of said screw, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM PITT CANNING.

Witnesses:

CHANNING WHITAKER,
SAML. G. STEPHENS.