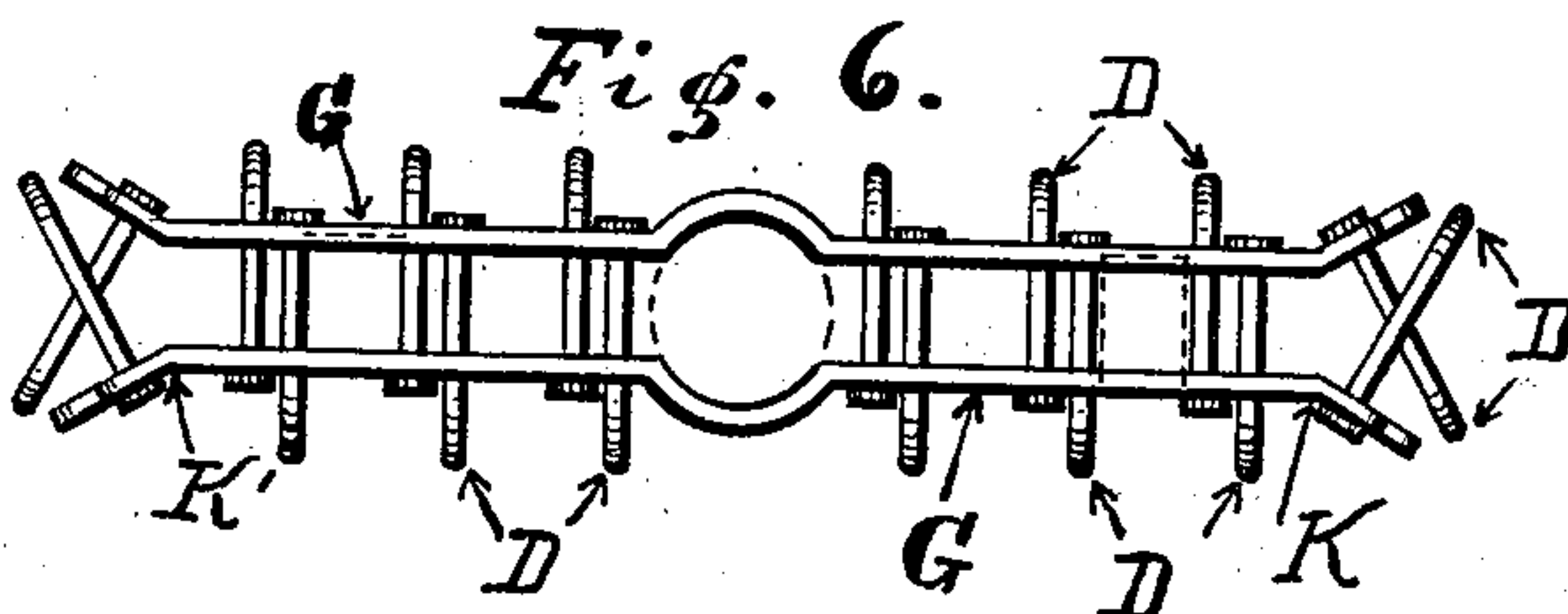
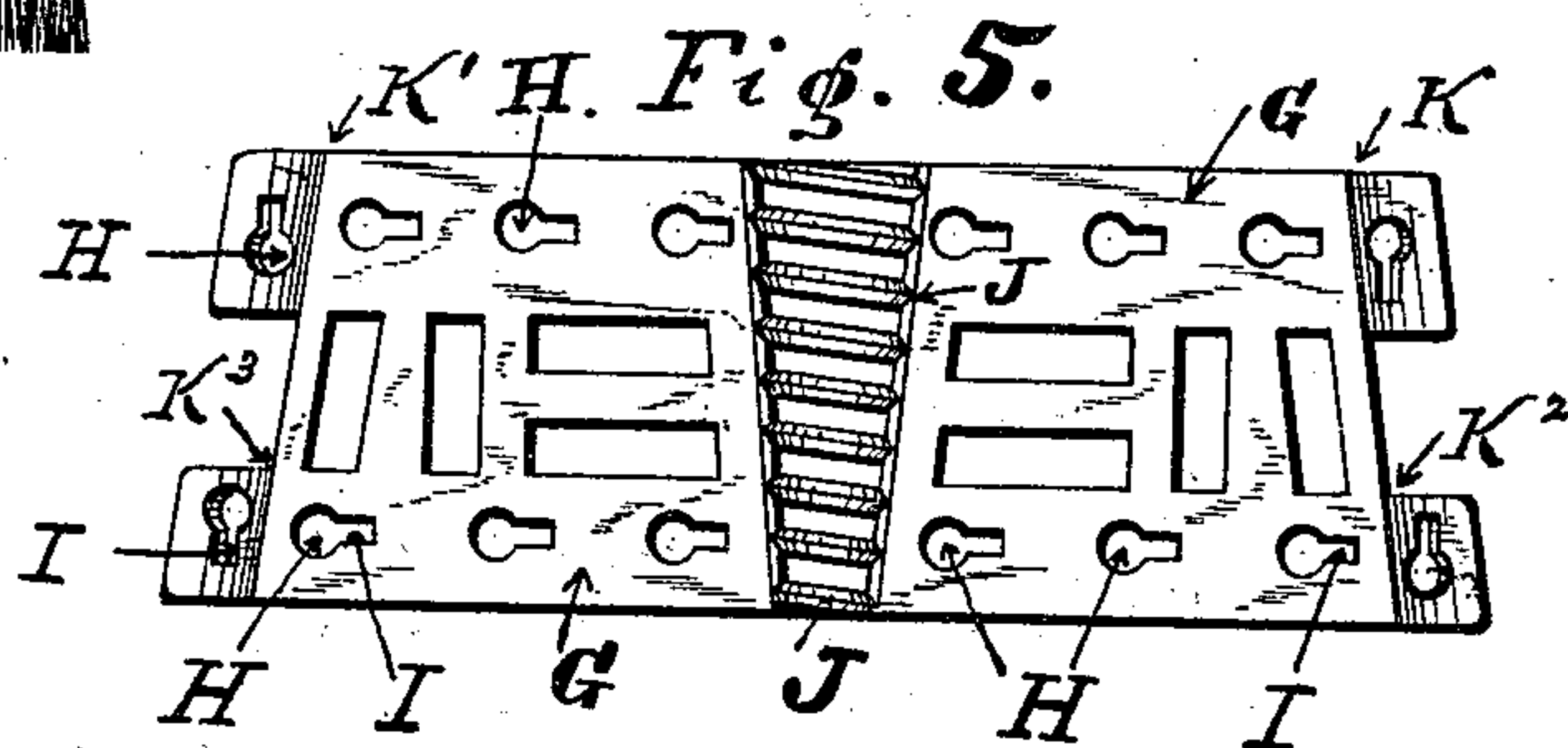
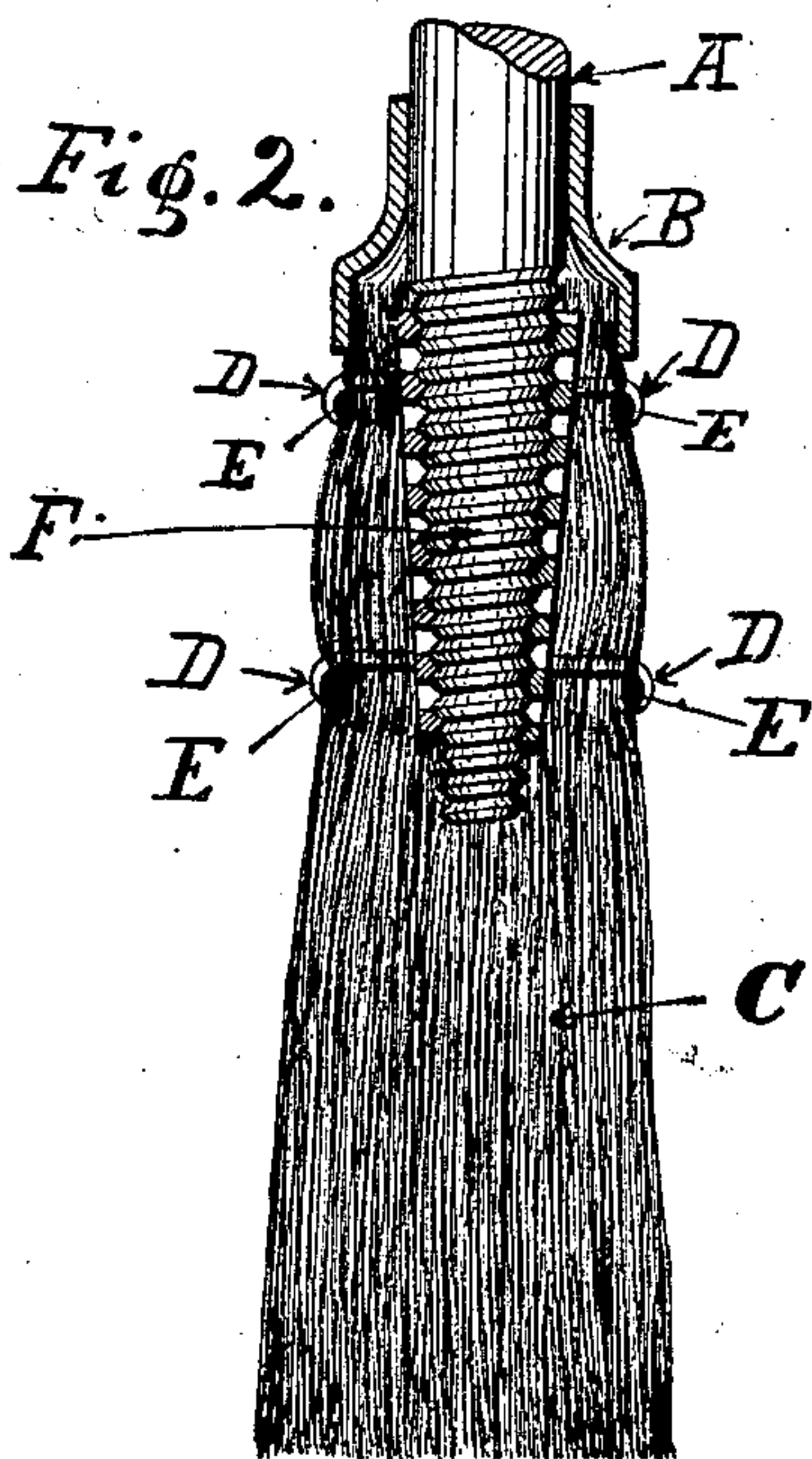
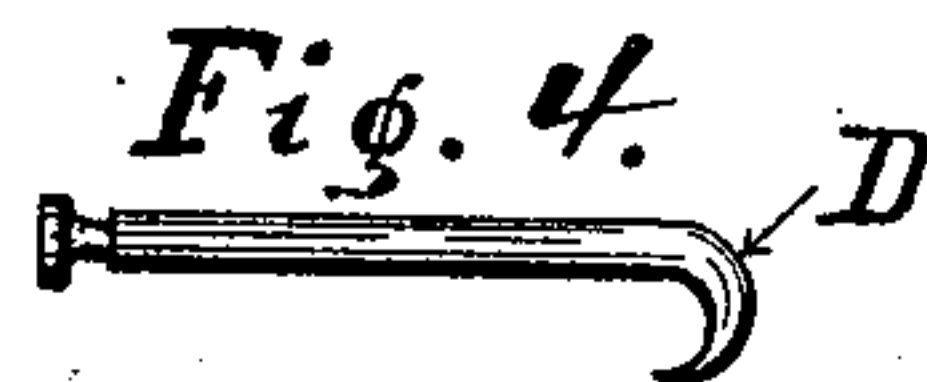
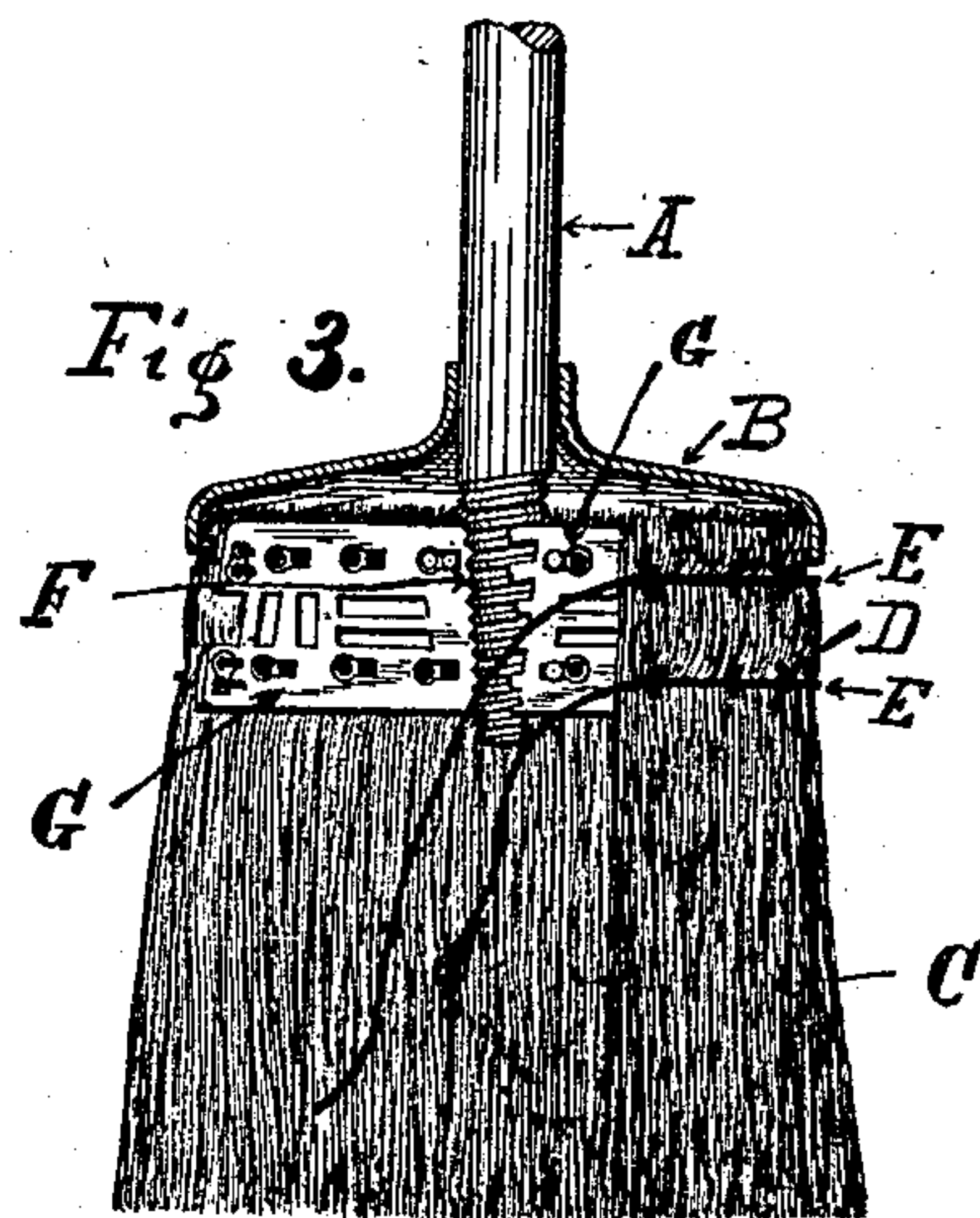
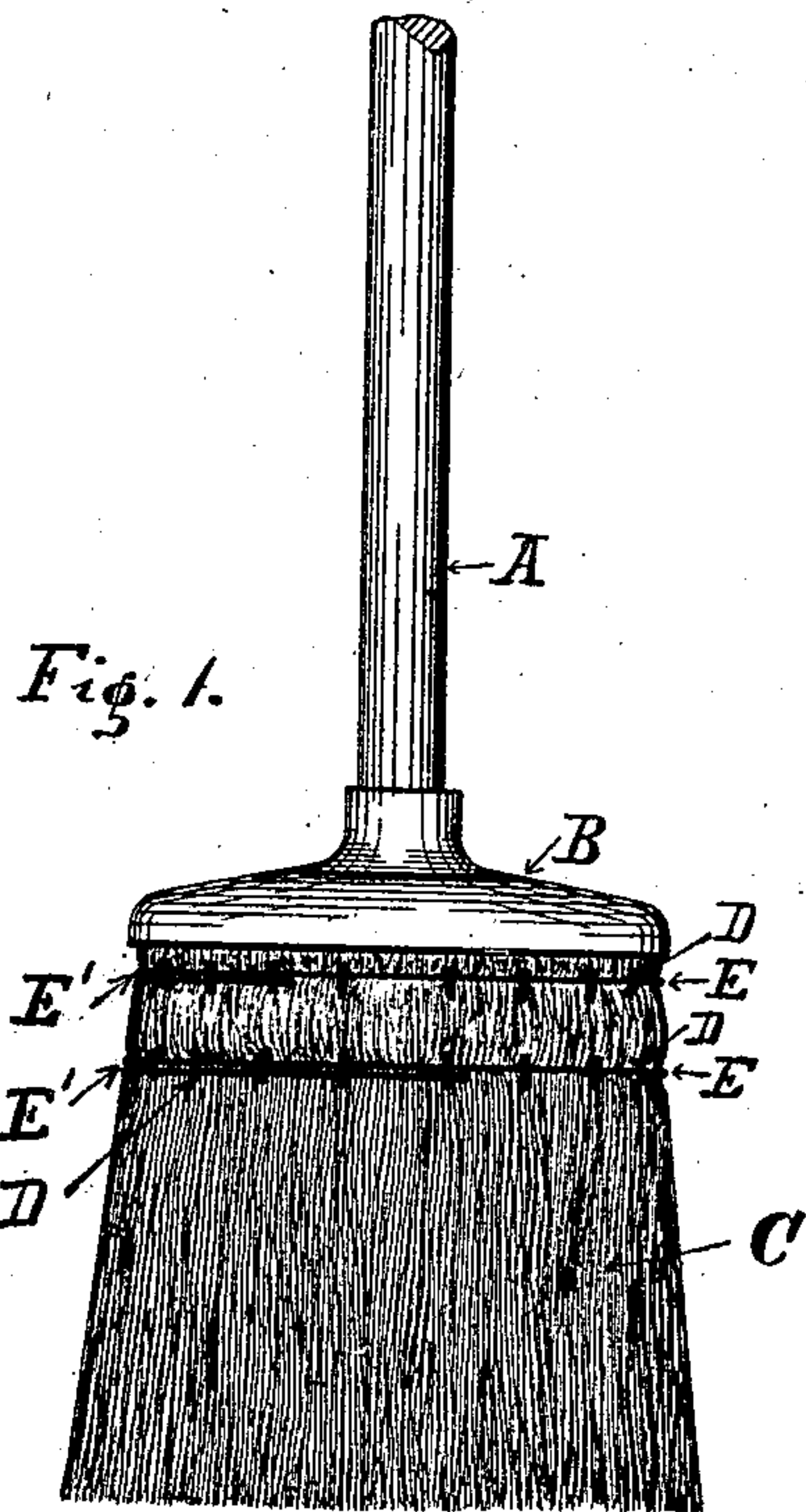


(No Model.)

W. J. BRADT.  
BROOM OR BRUSH.

No. 557,104.

Patented Mar. 31, 1896.



WITNESSES:

*Hiram D. Messenger*  
*James P. Stone*

*Wm. J. Bradt*

INVENTOR

*By Frank J. Kent*

ATTORNEY



# UNITED STATES PATENT OFFICE.

WILLIAM J. BRADT, OF NORTH HANNIBAL, NEW YORK.

## BROOM OR BRUSH.

SPECIFICATION forming part of Letters Patent No. 557,104, dated March 31, 1896.

Application filed July 23, 1895. Serial No. 556,936. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM J. BRADT, a citizen of the United States, residing at North Hannibal, in the county of Oswego and State of New York, have invented certain new and useful Improvements in Brooms or Brushes, of which the following is a specification.

My invention relates to improvements in brooms and brushes in which two plates of suitable material, in combination with a series of hooks arranged in pairs and secured at the neck end in said plates, compress and hold the broom-corn or brush of the broom between said plates and the binding-twine passed around the periphery of the broom under the hook of said hooks, when said plates are forced apart by screwing the conical-shaped screw formed on one end of the broom-handle into corresponding threads in said plates.

The object of my invention is to construct a broom-head so that when the broom-corn or brush of the broom is worn new broom-corn or brush may be inserted in place of the worn and a new broom constructed by any person of ordinary mechanical skill.

My invention consists in the detailed construction and arrangement of the parts, all as hereinafter more fully described, set forth and pointed out.

Like letters in the drawings indicate corresponding parts in all the figures.

I attain the objects desired by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my invention, showing the broom when completed. Fig. 2 is an enlarged representation of a transverse vertical section of the broom-head and the conical-shaped screw. Fig. 3 is a side elevation of my invention, partly in section, showing the interior arrangement of the various parts. Fig. 4 represents the hook used in my invention. Fig. 5 is a side elevation of the plate used in my invention struck up from sheet metal or cast in substantially the form indicated. Fig. 6 is a representation of the plates and hooks arranged as used in my invention, looking at them from the top of the plates.

A indicates the broom-handle broken off.

B is the shield; C, the broom-corn or brush;

D, the hooks; E, the binding-twine; F, the conical-shaped screw; G, the plates; H, the holes in the plates for the purpose of allowing the insertion of the hooks in the slots I and the free movement of the hooks through the plate in which they are not secured; I, the slots for the reception of the neck end of the hooks.

J are the threads for the reception of the conical-shaped screw F.

Having pointed out the various parts of my invention, their arrangement, combination, and operation in construction are as follows: Two plates G G are cast or struck up from sheet metal substantially in the form represented in Fig. 5, and provided with the holes and slots H and I, respectively, and the conical-shaped nut-threads J, and also bent as indicated at K, K', K<sup>2</sup>, and K<sup>3</sup>. The two plates are then placed with the opposite sides together, as indicated in Fig. 6, and the hooks D inserted through the holes H and the neck of the hooks passed into the slots I, one hook of each pair being inserted in and through the plates in opposite directions to each other, as shown in Fig. 6. The hook is formed after the insertion of the wire used to form it in the slots of the plates. The handle of the broom is terminated at one end in a cone upon which screw-threads F are cut to correspond with the threads J in said plates. In constructing a broom the two plates, in combination with the hooks, arranged as indicated in Fig. 6, are pressed together, thus forcing or projecting the hook end of the hooks out from the face of the plate in which they are not secured. Tufts of broom-corn or brush are then placed between the hooks D and the binding-twine E passed tightly around the outer surface and under the hook of each hook until the entire exterior surface of the plates is covered, as indicated in Fig. 1, the binding-twine being lapped at the ends, as indicated at E' E', in Fig. 1. The conical-shaped screw F is then inserted and screwed into the threads J between the plates, and thereby the plates are forced apart, tightening the binding-twine and compressing and binding the broom-corn or brush between the plates and said twine, the hooks operating as does the through-stitching in the ordinary house-broom. To complete the broom, the cap B is



passed over the end of the broom-handle and adjusted to cover the ends of the broom-corn or brush, as indicated in Fig. 1.

When the broom-corn becomes worn, the same may be removed and new put in its place, as hereinbefore described, and a new broom thereby formed.

Having now fully and particularly described the nature of my invention and ascertained the object thereof and the manner in which the same is to be used and operated, I declare that what I claim as my invention, and desire to secure by Letters Patent, is—

1. A broom-head comprising two metal plates, G, provided with the holes, H, slots, I, nut-threads, J; having the ends of said plates bent as indicated at K, K', K<sup>2</sup>, K<sup>3</sup>; in combination with the hooks, D, and the con-

ical-shaped screw, F, all constructed and arranged substantially in the manner indicated and for the purposes herein set forth.

2. The combination, in a broom, of the broom-corn or brush, C; the binding-twine, E; the plates, G, provided with the holes, H, slots, I, and nut-threads, J; the hooks, D, constructed and adjusted substantially as indicated; and the conical-shaped screw, F, formed upon one end of the broom-handle, said screw being used to force the plates apart, and all the parts constructed substantially and adjusted to one another as indicated and for the purposes herein set forth.

W. J. BRADT.

Witnesses:

HIRAM D. MESSENGER,  
JAMES P. HOWE.