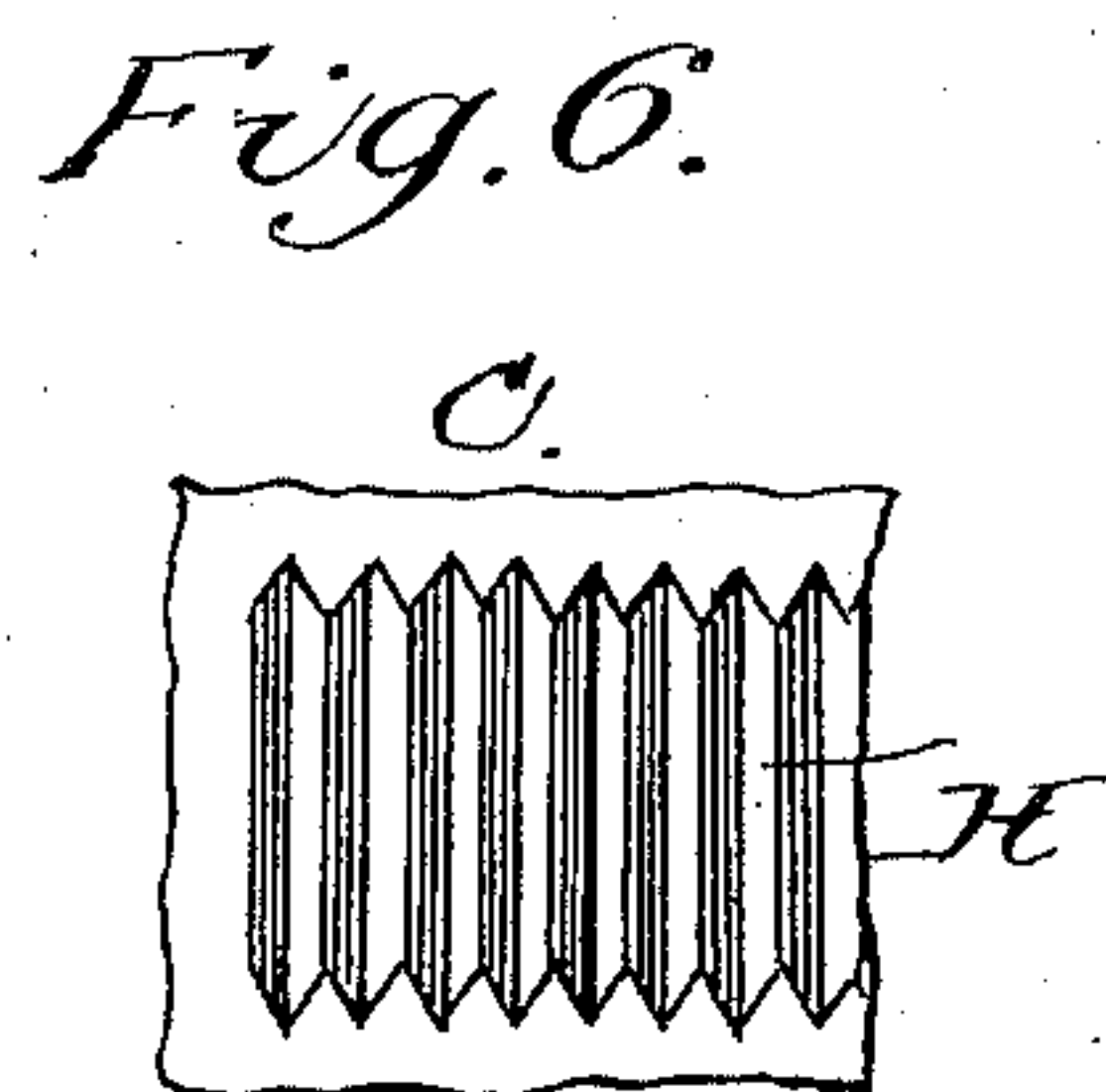
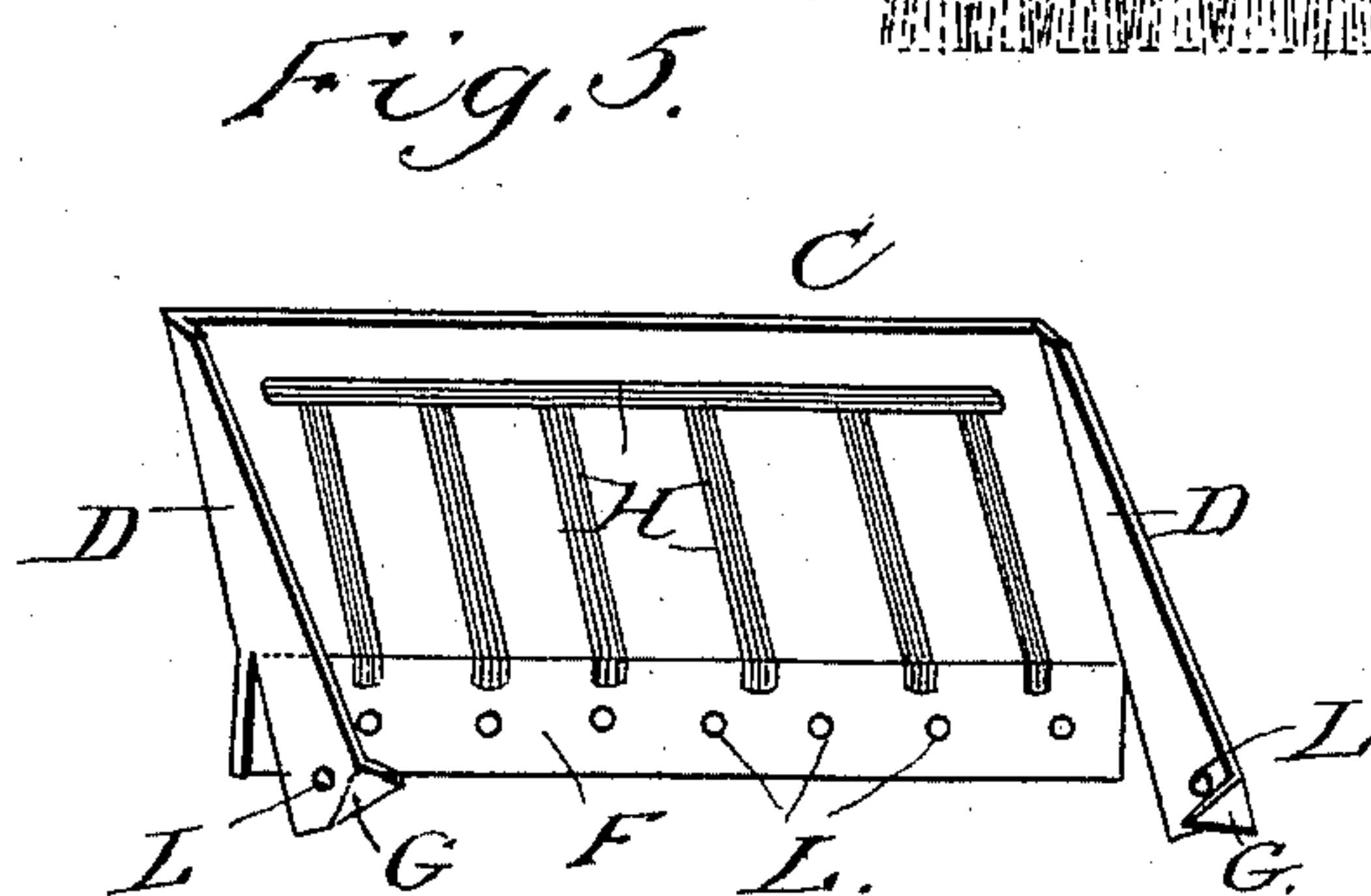
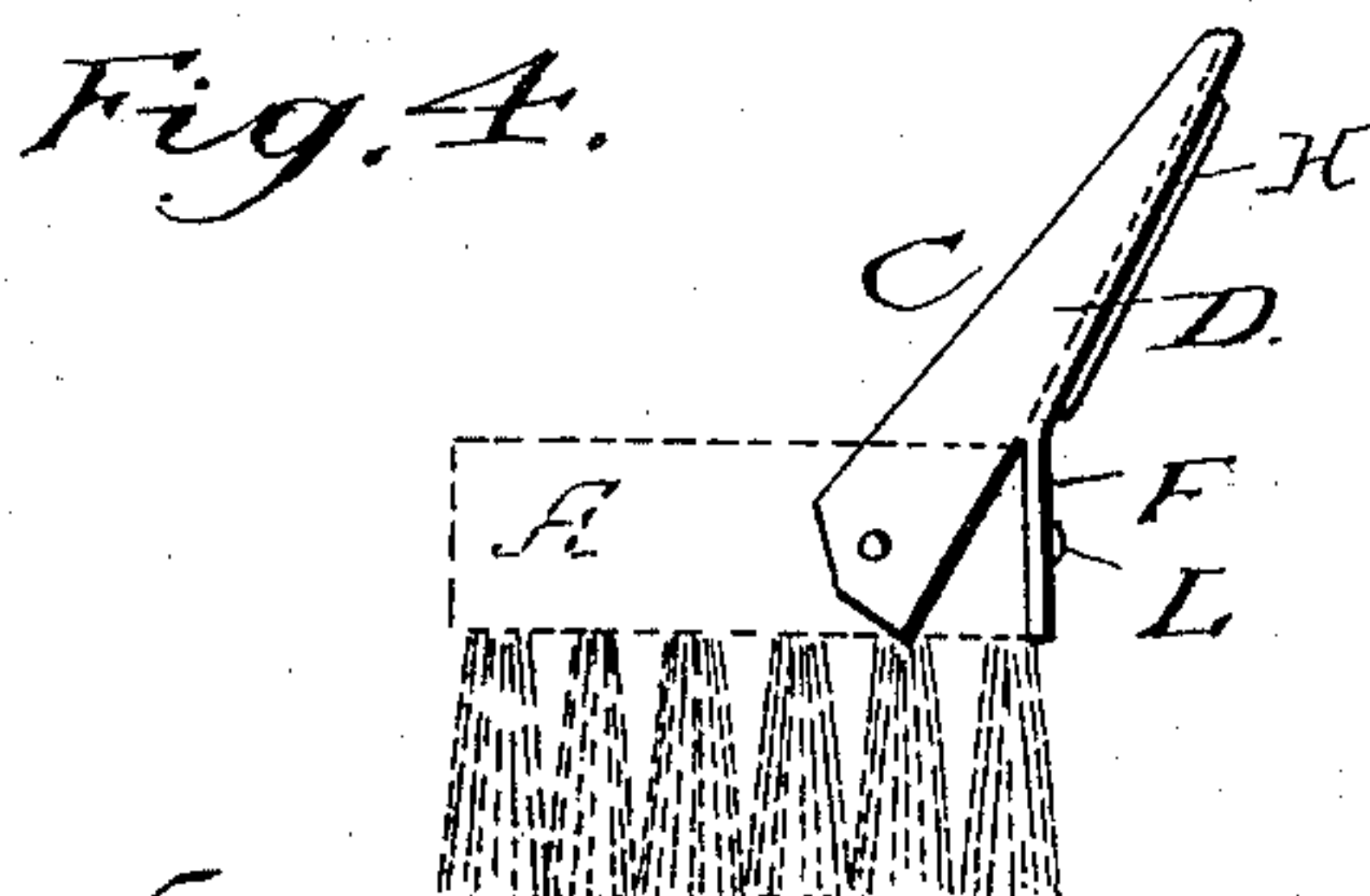
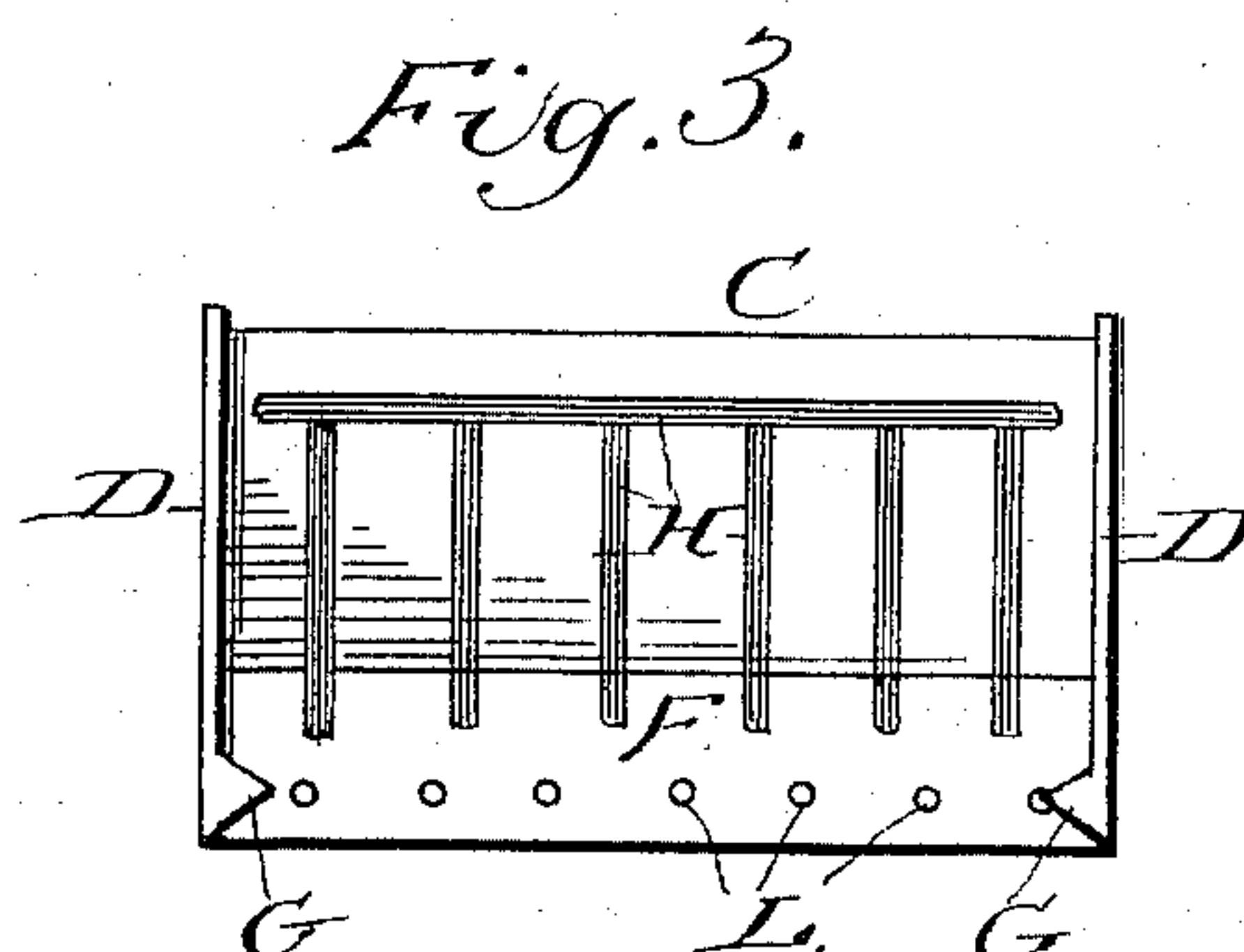
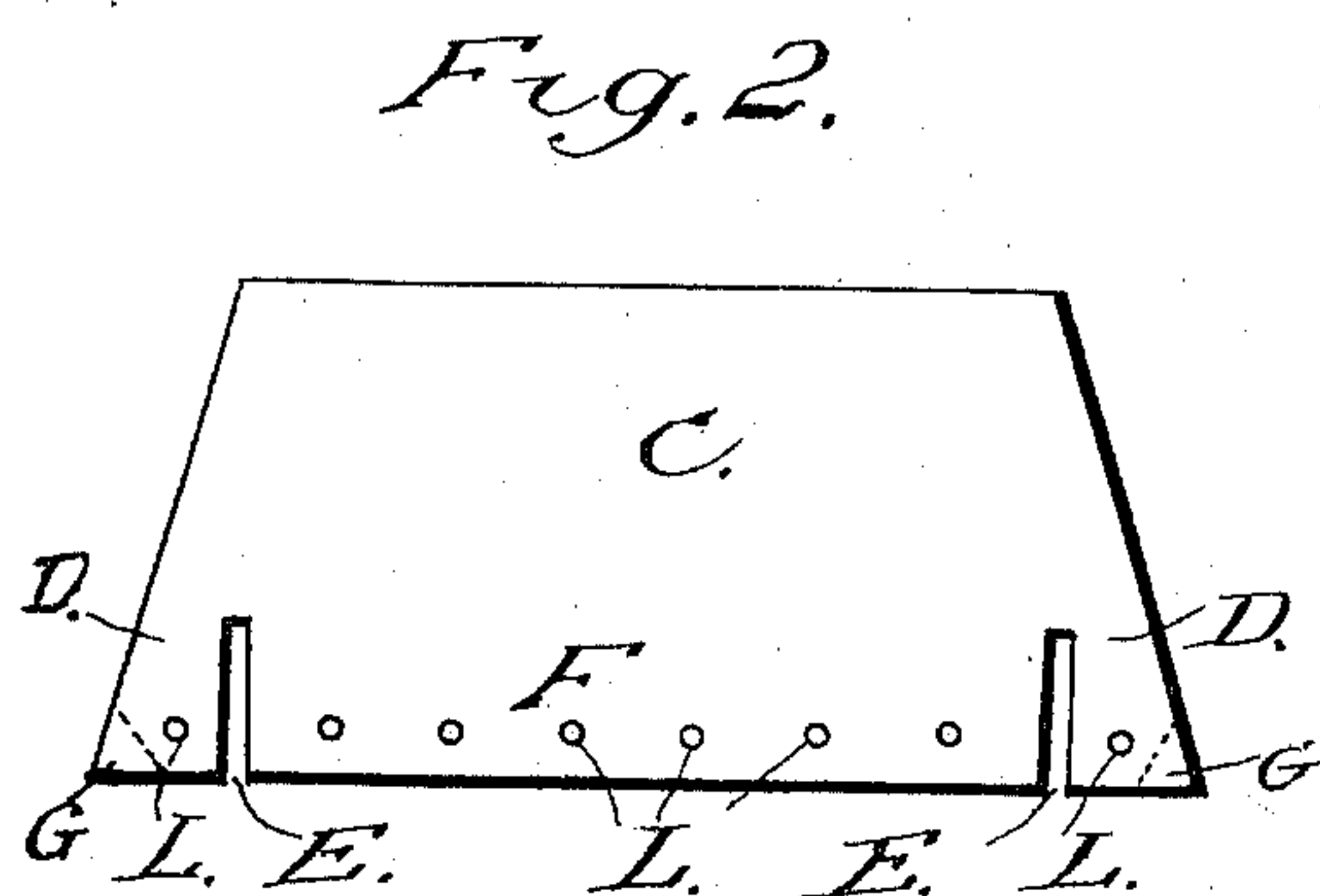
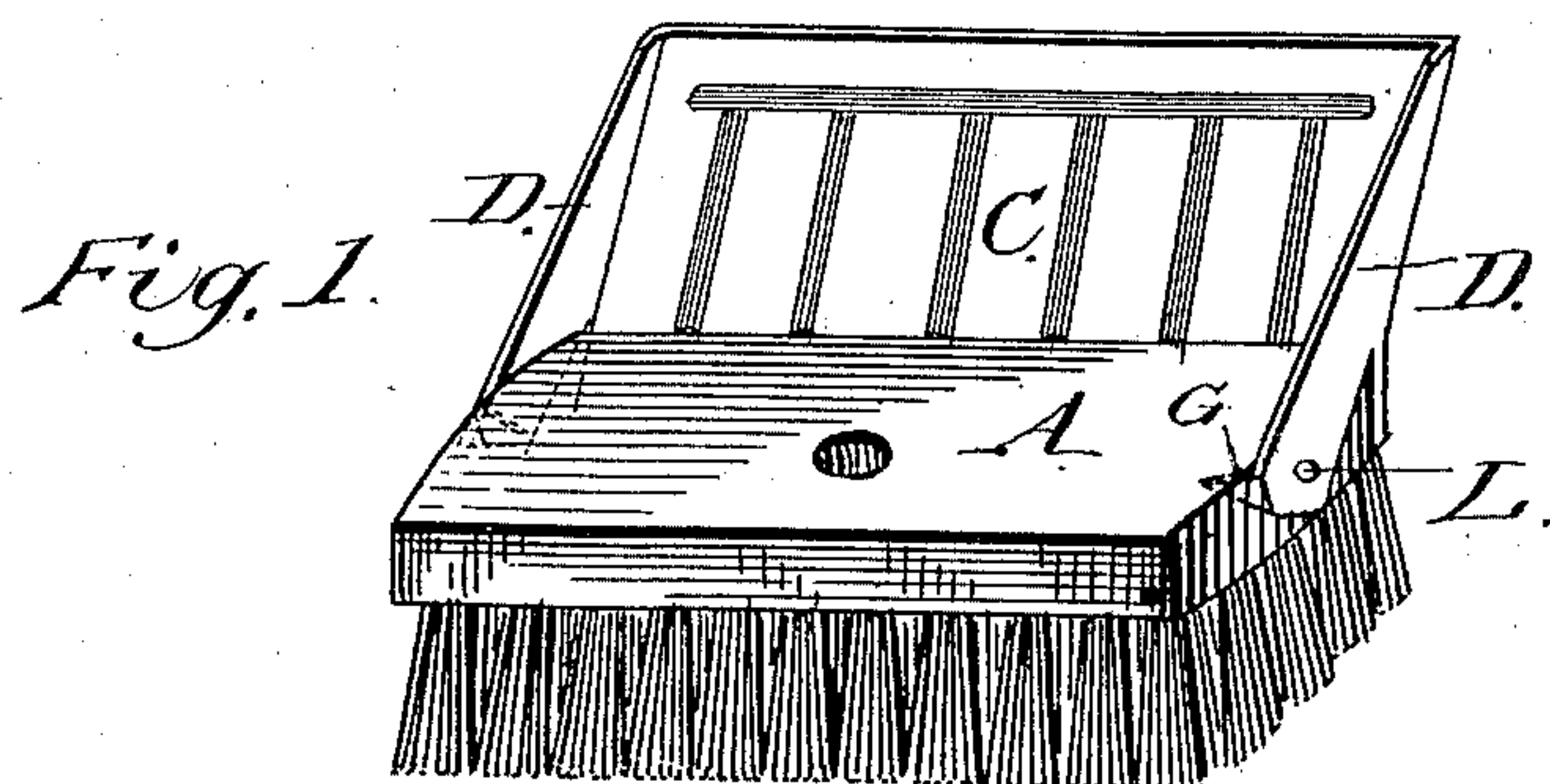


(No Model.)

F. WITTRAM.
BROOM ATTACHMENT.

No. 585,897.

Patented July 6, 1897.



WITNESSES

Chapman W. Fowler.
Wm. P. Ballard

INVENTOR

Frederick Wittram,
by Dewey & Co
his Attorneys

UNITED STATES PATENT OFFICE.

FREDERICK WITTRAM, OF SAN FRANCISCO, CALIFORNIA.

BROOM ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 585,897, dated July 6, 1897.

Application filed December 2, 1895. Serial No. 570,821. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK WITTRAM, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented a new and useful Improvement in Attachments for Brooms, of which the following is a description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a scraping attachment for brooms.

It consists, essentially, in a novel construction of the scraper and means for strengthening it and forming braces integral with the scraper, whereby the latter is prevented from being twisted or bent out of shape.

It also consists in details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 represents a perspective view of a broom embodying my invention. Fig. 2 illustrates a scraper-blank. Fig. 3 illustrates the blank with its ends bent at right angles with the body. Fig. 4 is an end view of Fig. 3. Fig. 5 is a perspective view of the blank shown in Fig. 3. Fig. 6 shows a modified form of corrugated surface for the scraper.

In the construction of combined brooms and scrapers it is customary to fix the scraper upon the back A of the broom by nails, screws, or sometimes by ears or lugs which fold down over the ends of the back A.

In my invention the scraper C is preferably stamped out from a sheet of sufficiently stiff metal bent longitudinally at an obtuse angle, so that the portion F will be adapted to be secured by nails or screws passed through holes L made along the edge or back of the part A. It will be manifest that when turned in one direction this part F will be attached to the edge, and if the plate be turned over it will bring this part upon the top, so that it might be attached in either way, as found most convenient or satisfactory. In cutting the plate I have shown it cut with the ends D diverging from one side toward the other in the form of a trapezoid, and having slits E made near the ends and parallel with each other. If desired, these ends D may be formed with prongs G, adapted to be passed into the head

A to additionally secure the scraper. These slits extend inwardly from the longest side of the plate, and as the ends of the plate are made divergent, as before described, the strips D, which are separated by the slits, will converge from the outer ends toward the inner ends of the slits, where they are the narrowest. These partially-separated strips are then bent, as shown in the drawings, so that a bend or fold is made on the line with the slits, this fold terminating at the angles where the narrower sides meet the ends. This forms a bracing-piece which extends in line from the outer portion of the scraper across the end of the head A, to which these bracing-pieces may be secured by pressing the bent corners G into the head, and by pins or other fastenings.

It will be manifest that the whole plate may be struck up at a single operation by the use of properly-constructed dies and be ready to be applied to the heads A.

In order to strengthen that portion of the plate B which projects outwardly from the head A, I have found that by forming the dies so as to strike up this surface into corrugations, as shown at H, this portion of the scraper will be greatly strengthened. These corrugations may be of the form shown in Figs. 1, 3, and 5 or V-shaped form shown in Fig. 6 without departing from the spirit of my invention.

The angular end pieces, which extend down upon each end of the broom-head to form braces, are fastened by pins or bolts at right angles with the pull, so that no strain brought upon them will pull them out without destroying the wood into which the pins are driven or else shearing the pins off entirely.

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

1. The combination with a head A, of a scraper made of sheet metal bent at an obtuse angle longitudinally, having one portion attached to said head and having its ends bent substantially at right angles to its body whereby the bent portions stand on edge and extend down upon the outside of the ends of the head and are secured thereto.

2. A scraper consisting of a blank of metal trapezoidal in shape and having ends diver-

ging from the upper to the lower edge, said
blank being slitted near each end in line with
the angles formed between the ends and the
upper side, said ends being folded on the line
5 of the slits whereby they stand on edge and
substantially at right angles with the blank
and said blank being bent longitudinally to

an obtuse angle on a line which intersects the
inner ends of the slits.

FREDERICK WITTRAM.

Witnesses:

Y. WITTRAM,

V. WITTRAM.