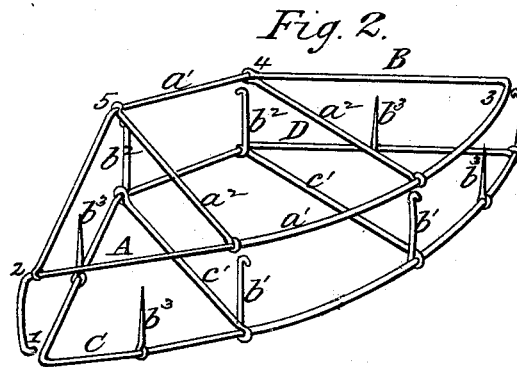
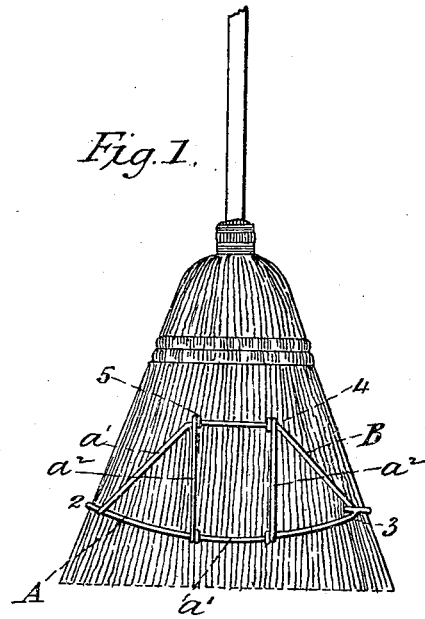


T. F. BOYER.

Broom Clamp.

No. 53,776.

Patented April 10, 1866.



Witnesses:

Wm. Mousin
J. D. Boyer

Inventor:

Thodore F. Boyer

UNITED STATES PATENT OFFICE.

THEODORE F. BOYER, OF HARRISBURG, PENNSYLVANIA.

IMPROVED CLAMP FOR BROOMS.

Specification forming part of Letters Patent No. 53,776, dated April 10, 1866.

To all whom it may concern:

Be it known that I, THEODORE F. BOYER, of the city of Harrisburg, in the State of Pennsylvania, have invented a new and useful Improvement in Clamps for Brooms; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents my said improved clamp applied to an ordinary corn broom, and Fig. 2 a perspective view of the said clamp detached, like letters and numbers indicating the same parts when in both figures.

Clamps are applied to new corn brooms for the purpose of stiffening the lower ends of the fibers, and thus rendering the implement much more effective for sweeping carpets; but neither of those heretofore used are adjustable to different heights or positions on the same broom, and consequently have to be dispensed with when the fibers of the broom become worn off so as to be too stiff and unyielding for use under the compression of the clamp, and those which are made of metal plates are too heavy, rendering the use of the broom very tiresome, and, besides, they are very liable to cut the binding-cords of the broom and come off in using.

The purpose of my improvement is to obviate these objections and defects by producing a metallic clamp that will be not only cheaper, lighter, and more durable in use, but a clamp that can also be readily applied and adjusted at different heights, so that its position can be varied as the splints or fibers wear shorter.

My invention consists, substantially as hereinafter described, in making a broom-clamp of stiff wire in two corresponding parts, adjustable together at any time and at any required height or position on a broom between them, and without any direct connection with the binding-cords of the latter.

In the drawings, A B is the upper, and C D the lower, part of the clamp. The whole clamp is made of tinued or galvanized wire of about No. 13 in size. The upper part, A B, consists, mainly, of a single piece, *a'*, of said wire having its end bent into a small hook, 1. Then at about three-fourths of an inch therefrom, at 2, it is bent nearly to a right angle, and from thence into a large curve, 2 to 3, the

length of the chord of which is a little less than the usual width of the broom, at about three inches, more or less, from its lower end. The wire is then bent at 3 toward the large curve 2 to 3 at an acute angle, and left straight from 3 to 4, say, in length, five or six inches, where it is again bent to an obtuse angle and left either straight or curved for the length of, say, three or four inches, to 5, at which point it is again bent in like manner; then continued straight, say, in length five or six inches, to 2, where it is connected by a loop. (See Fig. 2.)

The angles 4 and 5 are, respectively, connected to the large curved portion opposite by means of two additional straight pieces of wire, *a² a²*, having loops for the purpose on the ends of the same. All the looped connections are then soldered fast to the main piece or frame *a'*.

The lower part, C D, of the clamp is formed and constructed precisely like the upper part, A B, as just described and shown, with the addition of two uprights, *b' b'*, rising about three-quarters of an inch high from the plane of the large curve, and also of two uprights, *b² b²*, rising about one inch high from the two angles opposite to the said curve. These uprights are formed by continuations of the looped ends of the cross-wires *c' c'*, are soldered fast, and have each a small hook bent on its upper end, as seen in Fig. 2. There are also four other uprights, *b³ b³ b³ b³*, which are looped and soldered fast, so as to produce pointed spikes, as seen in the same figure.

In applying this wire clamp to a broom the lower part, C D, is laid down with its hooked and its pointed uprights *b' b² b³* projecting upward. The broom is then pressed down upon it by hand, so as to cause the hooks of the uprights *b' b²* to come entirely through the fibers of the broom. The upper part, A B, is now laid directly and correspondingly over the lower part, C D, with the broom between, and the projecting hooks of the uprights then slipped over the frame-wire *a'* of the upper part, A B, and, finally, the two outside corner hooks attached, respectively, to the opposite angles, thus clamping the splints of the broom together so as to stiffen the lower ends of the same for sweeping as required.

It will be seen that this clamp is cheap of construction, light, not liable to slip or get loose in using the broom, has no connection

with the binding-cords of the broom, and is adjustable to any height or position on the broom.

I wish it to be understood that I do not intend to confine myself to the particular form and dimensions specified, nor to the number of uprights stated, as these can be varied without departing from the principle of construction; but,

Having fully described what I believe to be the best mode of constructing my improved clamp for brooms, what I claim as new, and desire to secure by Letters Patent, is—

The wire clamp described, the same consist-

ing of the upper part, A B, formed of a single piece of wire, a' , as described, and two straight pieces, $a^2 a^2$, attached thereto, and of the lower part, C D, formed and constructed like the said upper part, A B, with the addition of the uprights $b' b^2 b^3$, as described, the said two parts being adapted for adjustment together on a broom, substantially as and for the purpose described.

THEODORE F. BOYER.

Witnesses:

BENJ. MORISON,
J. D. BOYER.