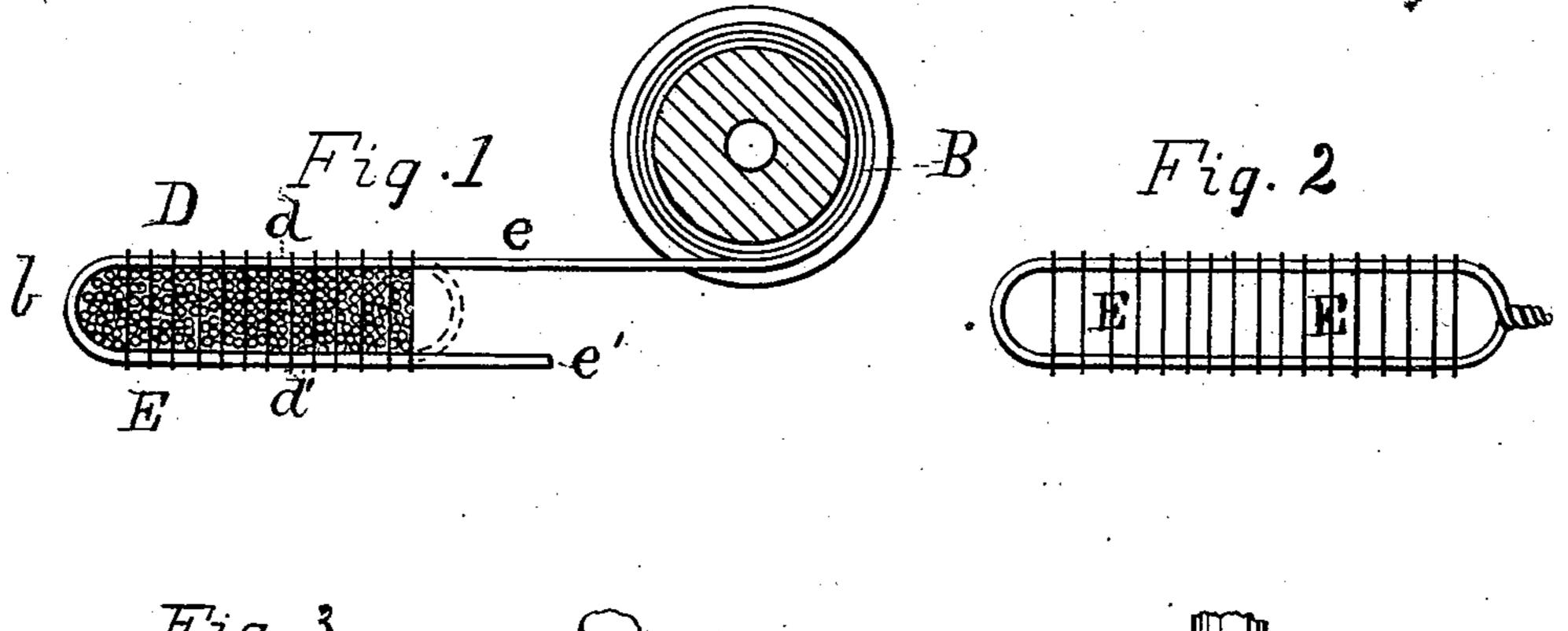
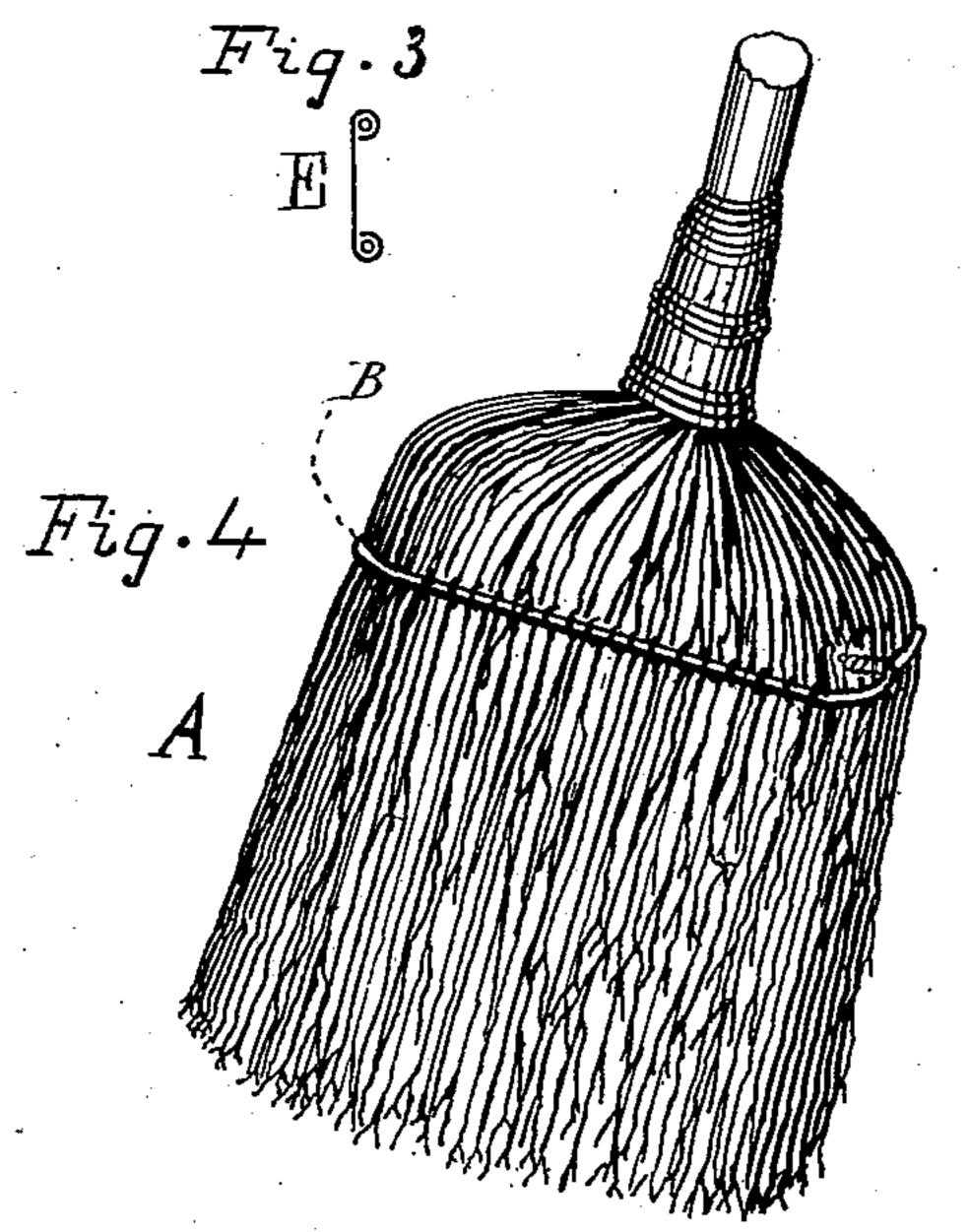
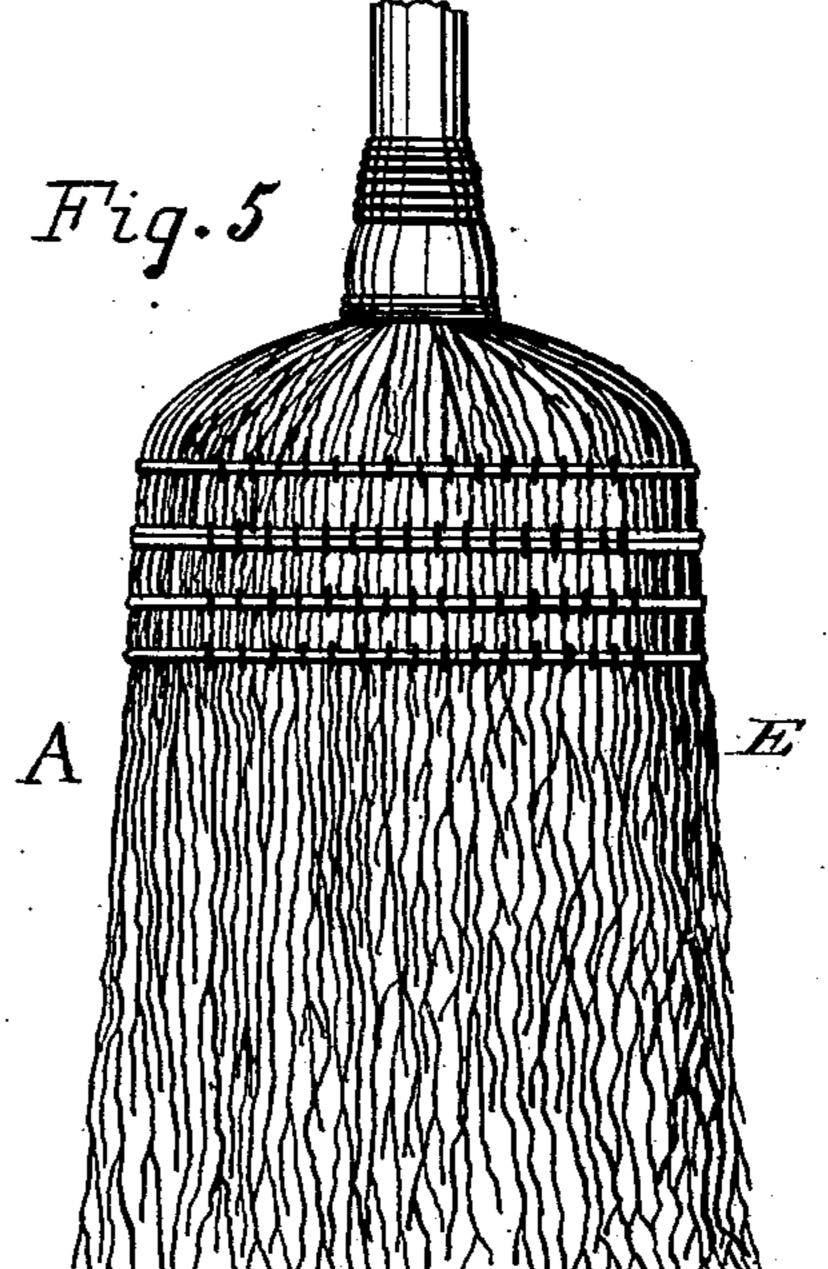
## J. WAGNER, Jr., & L. WAGNER. Broom.

No. 227,139.

Patented May 4, 1880.







INVENTORS

Jacob Wagner Jr. Louis Wagner

By Goyne My Olliott

Recorneys

## UNITED STATES PATENT OFFICE.

JACOB WAGNER, JR., AND LOUIS WAGNER, OF CHICAGO, ILL., ASSIGNORS, BY MESNE ASSIGNMENT, TO WAGNER WIRE SEWING MACHINE COMPANY, OF SAME PLACE.

## BROOM.

SPECIFICATION forming part of Letters Patent No. 227,139, dated May 4, 1880.

Application filed December 3, 1878.

To all whom it may concern:

Be it known that we, JACOB WAGNER, Jr., and Louis Wagner, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Brooms, of which the following is a specification.

Our invention relates to brooms provided with an encircling band or bands of wire, to which the stitches are attached.

Heretofore brooms provided with bands of wire to which the stitches are attached have had the ends of said bands connected together by means of hooks formed upon them, or by passing said ends by or lapping them over each other upon the flat side of the broom, so that the wires will be parallel and their ends pointing in opposite directions, and then winding each end about the band thus formed.

Brooms provided with the bands above referred to are incapable of being tightened by increasing the tension of the band after it has once been secured in position and fastened, except by first unfastening the band, which, of course, when again fastened, will materially weaken the fastening ends of the wire and render it liable to break, and thereby destroy the band for further use.

Furthermore, the ends, when thus secured, cause a broom to present an unsightly appearance, and render it liable to scratch furniture or catch in the clothing of the person using it.

The object of this invention is to produce a broom that may be and is tightened by the band, to which the stitches are secured after said band has been closed and fastened upon the broom, and conceal the ends of the same, so that it will, to the casual observer, appear to be of a continuous piece of wire.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 shows the position of the binding45 wire with the stitches attached, preparatory to closing its ends; Fig. 2, a plan view of the same with its ends closed by twisting together; Fig. 3, a cross-section of the loop, showing the manner of attaching the stitches;

Fig. 4, a perspective of my broom with parts 50 broken away to show the position of the twisted end after being turned into the broom. Fig. 5 is a modification, showing the binding-wire wound twice about the broom with its ends twisted together as in Fig. 2.

A represents a broom of the ordinary shape and of any desired size, secured to the stick in the usual manner. About the broom A is a binding-wire, B, forming a C-shaped loop, D, as indicated in Fig. 1 of the drawings, 60 with its free ends extending beyond the edge of the broom, the purpose of which will be more fully hereinafter described. To the parallel sides of the loop D are secured, after the loop is formed about the broom, stitching-65 wires E by bending said wires about the loop, as shown in Fig. 1.

F represents the manner of securing the band thus attached to the broom, which consists in bringing the free ends together upon 70 the edge of the broom and twisting them together at right angles to the length of the broom. The ends thus twisted are then bent over and turned into the broom to conceal them, so that the broom will present the appearance indicated in Figs. 4 and 5 of the drawings.

By thus twisting the ends together, as we have described, we are enabled to tighten the band upon the broom while securing it in 80 position, and as the strain is equal upon both edges of the broom, and also in a direct line through it, the broom is prevented from fulling or puckering as the band is being thus secured.

Furthermore, even after the twisted ends are turned into the broom, they may be, should the band become loosened by reason of the shrinkage of the straw or other cause, straightened out and the band be tightened by furgother twisting said ends.

Although we have described our broom as having the ends of its band closed upon the edges, it is obvious that it may have its ends similarly closed by twisting them upon either 95 side or face without departing from our invention.

Having thus described our invention, what

we claim, and desire to secure by Letters Patent, is—

1. A broom provided with a wire band for holding the stitches, secured thereto by having its free ends twisted or wound about each other at a right angle to the length of the broom, substantially as shown and described.

2. As an article of manufacture, a broom having its encircling-band secured thereto by

twisting its free ends together, as described, 10 said ends being turned into the body of the broom, whereby the broom will present the appearance of having a continuous wire band.

TACOR WAGNER JR

JACOB WAGNER, JR. LOUIS WAGNER.

Witnesses:

CHARLES ULBRICHT, CHARLES WAGNER.