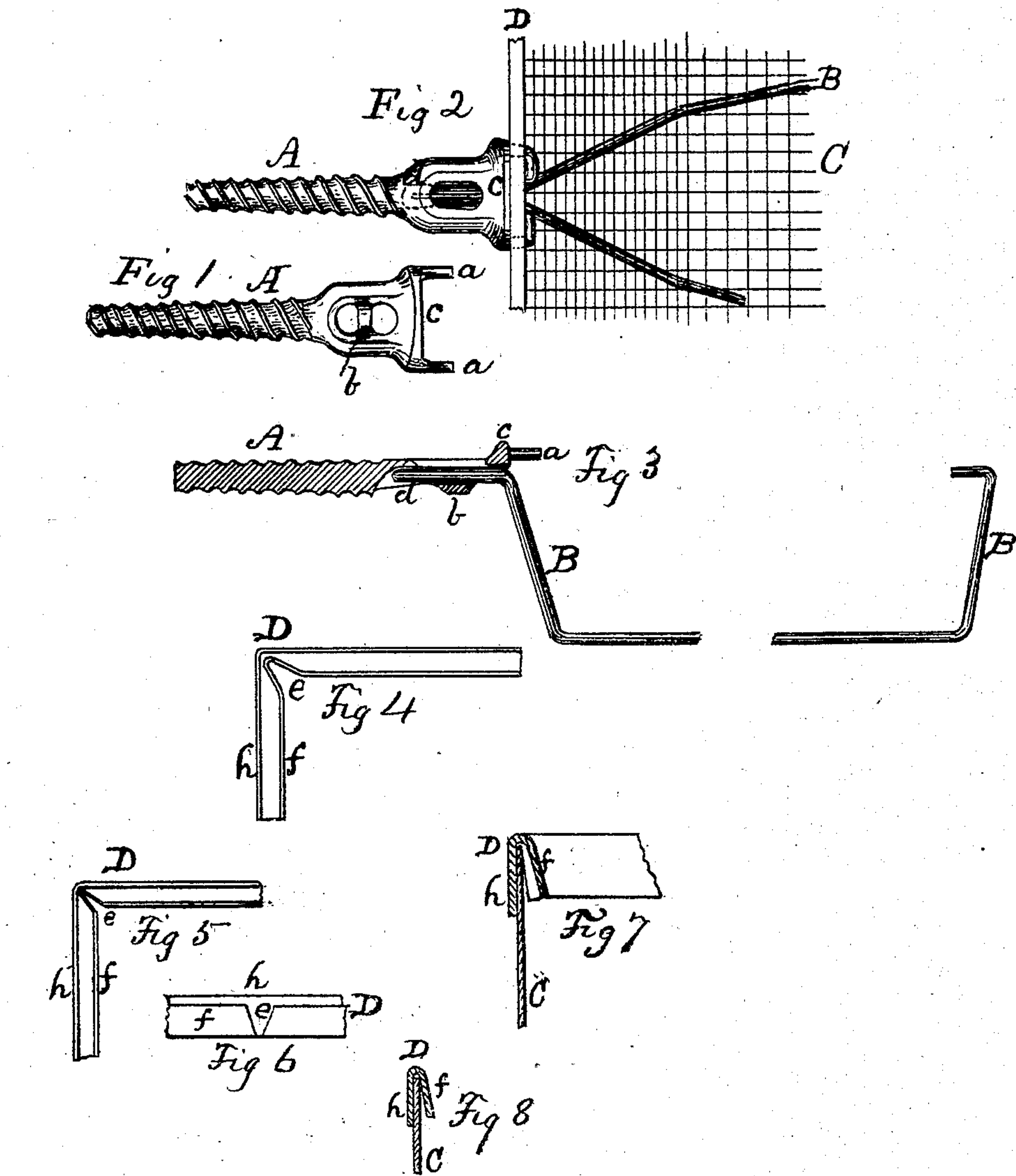


W. J. Johnson.  
IMPROVEMENT IN CORN POPPERS

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PATENTED JUL 4 1871



Witnesses  
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# UNITED STATES PATENT OFFICE.

WILLIAM J. JOHNSON, OF NEWTON, ASSIGNOR TO HIMSELF AND HENRY A. HILDRETH, OF LOWELL, MASSACHUSETTS.

## IMPROVEMENT IN CORN-POPPERS.

Specification forming part of Letters Patent No. 116,600, dated July 4, 1871.

*To all whom it may concern:*

Be it known that I, WILLIAM J. JOHNSON, of Newton, in the State of Massachusetts, have invented certain new and useful Improvements in Corn-Poppers, of which the following, with the drawing, is a full description:

My improvements consist in a new method of constructing the binding and of attaching the screw-shank to the binding and the wire brace of the popper, as well as the construction of the screw-shank for the purpose.

In the drawing, Figure 1 is an upper-side view of the screw-shank. Fig. 2 is a top view of the shank attached to the body of the popper. Fig. 3 is a section of the shank and wire brace. Fig. 4 is an under-side view of a corner of my improved binding. Fig. 5 is a similar view of the old kind of binding. Fig. 6 is a side view of the old binding as prepared to bend and form a corner. Figs. 7 and 8 are sections of the binding attached to the wire of the popper-body.

In the drawing, A represents the screw-shank; B, the wire brace; C, the wire cloth of the body of the popper. D is the binding of sheet metal bent over the top edges of the wire-cloth body, which is formed into shape by dies or otherwise. *a a* are fork-like projections on the front end of the screw-shank. *b* is a brace or bar across the bottom and near the middle of the open cavity, between the tines of the fork; and *c* is a brace or bar across the top and near the front of this cavity. *d* is the rear end of the wire brace, which enters the cavity of the screw-shank. *e* is the corner of the binding, of which *f* is the inside and *h* the outside flap.

In the old-style poppers the inside flap *f* of the binding has a triangular piece, *e*, Fig. 6, cut out before the binding is bent to form a corner. When bent it appears as in Fig. 5. My improve-

ment consists in corrugating the inside flap when the corner is bent without cutting it, as appears in Fig. 4. By this means the binding-edge of the popper is greatly strengthened and stiffened at the corners. The binding is put on the wire body and fastened to it in the usual way. My screw-shank is constructed with an open cavity or recess at its front, having a brace or bar, *c*, across its top, near the front of the tines *a a*, and another brace or bar, *b*, across its bottom, near the middle, forming a kind of mortise, into which the rear end *d* of the wire brace B enters under *c* and over *b*. The front of the screw-shank, which is of malleable metal, has two fork-like projections, *a a*, which pass through holes in the binding, and are clinched down, as in Fig. 2. In this manner the shank is firmly attached to the body of the popper, and it also firmly holds the end *d* of the wire brace, which is slipped into the cavity of the shank. The brace is otherwise attached to the body of the popper in front, in the usual manner.

What I claim is—

1. The screw-shank, with malleable tines *a* and brace *b*, substantially as described.
2. The binding, crimped or corrugated at its corners, substantially as set forth.
3. The combination of binding, wire brace, and screw-shank, severally constructed and arranged in relation to each other substantially as shown.
4. The corn-popper, with body, binding, wire brace, and screw-shank combined, when severally constructed and arranged substantially as described.

In testimony whereof I have hereunto subscribed my name.

Witnesses:

A. B. ELY,

A. F. JOHNSON.

WM. J. JOHNSON.