

(No Model.)

E. A. ALPRESS.

ART OF MAKING SCREW EYES.

No. 270,570.

Patented Jan. 16, 1883.

Fig. 1.

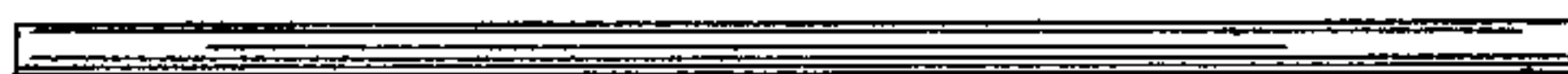


Fig. 2.

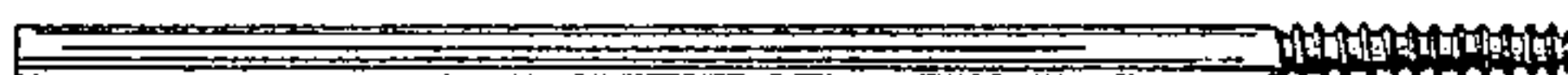
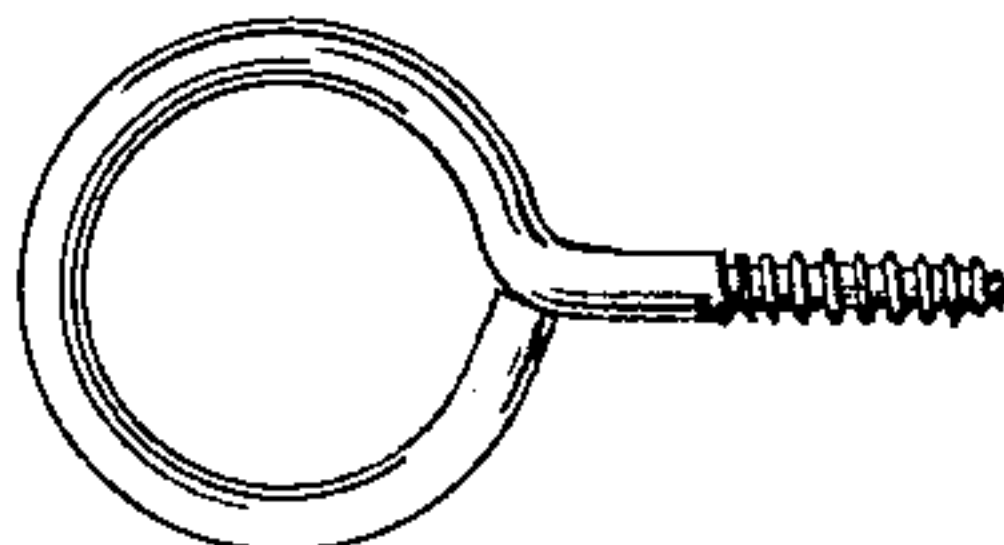


Fig. 3.



Witnesses
John Edwards Jr.
and W. M. Mory Jr.

Inventor.
Edward A. Alpress.
By James Shepard
att'y.

UNITED STATES PATENT OFFICE.

EDWARD A. ALPRESS, OF NEW BRITAIN, CONNECTICUT.

ART OF MAKING SCREW-EYES.

SPECIFICATION forming part of Letters Patent No. 270,570, dated January 16, 1883.

Application filed November 2, 1881. (No model.)

To all whom it may concern:

Be it known that I, EDWARD A. ALPRESS, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in the Art of Manufacturing Screw-Eyes, of which the following is a specification.

My invention relates to an improvement in the art of manufacturing screw-eyes, in which the wire is first cut into straight blanks, then brightened by tumbling, then one end threaded, and then the unthreaded end is bent into a ring or eye; and the objects of my invention are to provide a mode of making screw-eyes which is adapted to be mainly performed by automatic machinery, and thereby to produce a better article at a less cost than heretofore.

In the accompanying drawings, Figure 1 represents the blank No. 1, Fig. 2 the blank No. 2, and Fig. 3 a finished screw-eye.

Heretofore in the manufacture of screw-eyes it has been the custom to form the ring or eye after cutting up the wire and before the thread was cut. The rings or eyes have a great variety of sizes, and therefore it is impracticable to make an automatic feeding arrangement to feed them to the dies for threading. Furthermore, the blanks, when thus bent, are of a form which it is difficult to feed automatically, even if all of one size, because, unlike a blank with a round head, these flat rings must all be presented to the holding devices with the eye lying in a certain position with reference to its flat sides and the holder. Consequently they have always been placed in the threading-machine by hand.

I take wire and first cut it into straight blanks of the proper length, as shown in Fig. 1, for one size of screw-eye. I next put the same in a tumbling-barrel and roll the blanks until they are bright. This must be done before threading, as otherwise the thread would be ruined. The form of the blank after being

tumbled is so nearly the same as before that Fig. 1 may be considered as a fair representation of the straight unthreaded blank both before and after tumbling. I then stack the blanks, one upon the other, in a suitable hopper and feed them automatically to threading dies or tools for cutting the thread upon one end thereof, as shown in Fig. 2. By having the blanks in this form they can readily be fed and threaded by an automatic machine, and by slight changes in minor parts one machine can be made to answer for all sizes and styles of eyes, as the size of the eye or ring to be formed will in no wise affect the machine for threading these straight and round blanks. After the blanks are threaded, as shown in Fig. 2, they are put through a second machine and the eye or ring formed thereon, and the same feeding devices employed in the threading-machine can also be employed in the forming-machine.

By performing the several steps successively, in accordance with my herein-described process of making screw-eyes, all of the labor may be performed by automatic machinery.

Machines for straightening and cutting wire automatically are well known, and after disclosing the foregoing process various machines for threading and bending automatically can be devised. I intend to make my threading and bending machines the subjects of separate applications for Letters Patent.

I claim as my invention—

That improvement in the art of making screw-eyes which consists in the progressive formation thereof by forming the stock into the succession of forms, as specified, and represented in Figs. 1 to 3, inclusive, of the drawings.

EDWARD A. ALPRESS.

Witnesses:

JAMES SHEPARD,
JOHN EDWARDS, Jr.