

W. Field,

Making Augers,

N^o 1553.

Patented Apr. 15, 1840.

Fig. 2

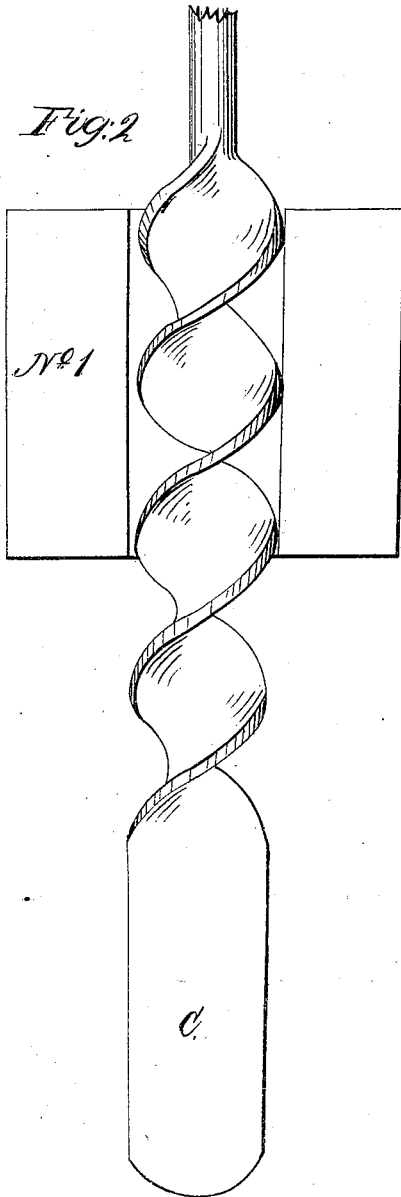


Fig. 3

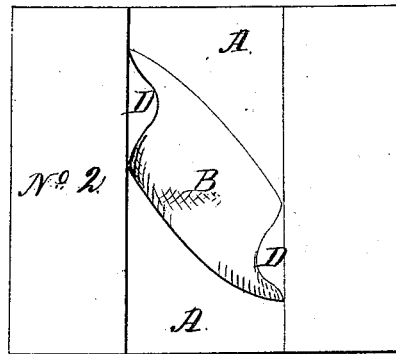
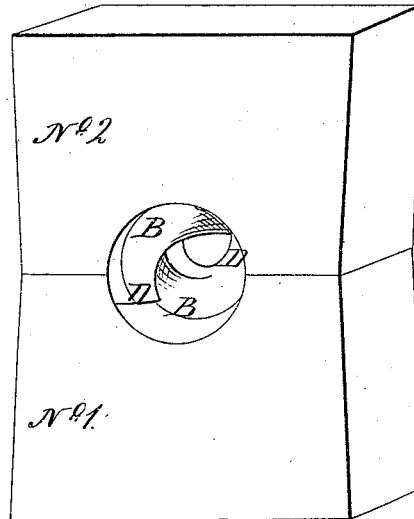


Fig. 1



UNITED STATES PATENT OFFICE.

WILLIAM FIELD, OF PAWTUCKET, RHODE ISLAND.

MANNER OF MANUFACTURING SCREW-AUGERS.

Specification of Letters Patent No. 1,553, dated April 15, 1840.

To all whom it may concern:

Be it known that I, WILLIAM FIELD, of Pawtucket, in the county of Providence and State of Rhode Island, have invented an
5 Improvement in the Manner of Manufacturing Screw-Augers, which improvement consists in the use of swages or dies for giving the twist to the metal, by which means the process of twisting is facilitated and in
10 consequence of the twist being given under the hammer the metal is consolidated and the article is rendered much superior to such as are twisted by hand or by the apparatus heretofore employed for that purpose; and
15 I do hereby declare that the following is a full and exact description thereof.

In the accompanying drawing Nos. 1 and 2 represent the two swages or dies employed by me. In Figure 1, they are placed upon
20 each other, as when in use. In Fig. 2, an auger in part twisted is shown as placed in one of the dies, its fellow die No. 2 Fig. 3, being removed. Each of these dies has a semicircular hollow or plate, A, A, extending from side to side, with the exception of
25 that part within said semicircle by which the twist is to be given to the auger; the diameter of said hollow must of course correspond with that which is to be given to the auger. In the middle of said semicircular plate, or hollow, there is, in each of
30 the dies, a segment of a screw, or thread, making upward of half a turn and standing obliquely within it at an angle of about 45°

this thread is rounded so as to form nearly 35 half a circle, and to fit the hollow of the thread to be formed in the auger. When the two dies are placed accurately upon each other, these threads cross each other at right angles, leaving the proper space to be occu- 40 pied by the metal of the auger. The thread in each die, should project into the corresponding die, as shown at D D. These swages, or dies may be affixed in any of the ways known to workmen so as to cause them 45 to come together with the requisite accuracy. These may be used with any kind of tilt or trip hammer, or by hand, as jumpers. In drawing out that part C, of the iron, which is to form the twist of the auger, it is 50 left thicker at the middle than toward the edges. In giving the twist the metal is to be turned around by hand, and when it has been thus passed through the dies it will be accurately twisted, and perfectly uniform 55 in all its parts.

Having thus fully described the nature of my invention and the manner in which I carry the same into effect, what I claim as my invention and desire to secure by Let- 60 ters Patent, is—

The forming the twist in screw augers by means of swages, or dies constructed and operating substantially as herein set forth.

WILLIAM FIELD.

Witnesses:

JAMES HUTCHISON,
BARNEY MONEY.