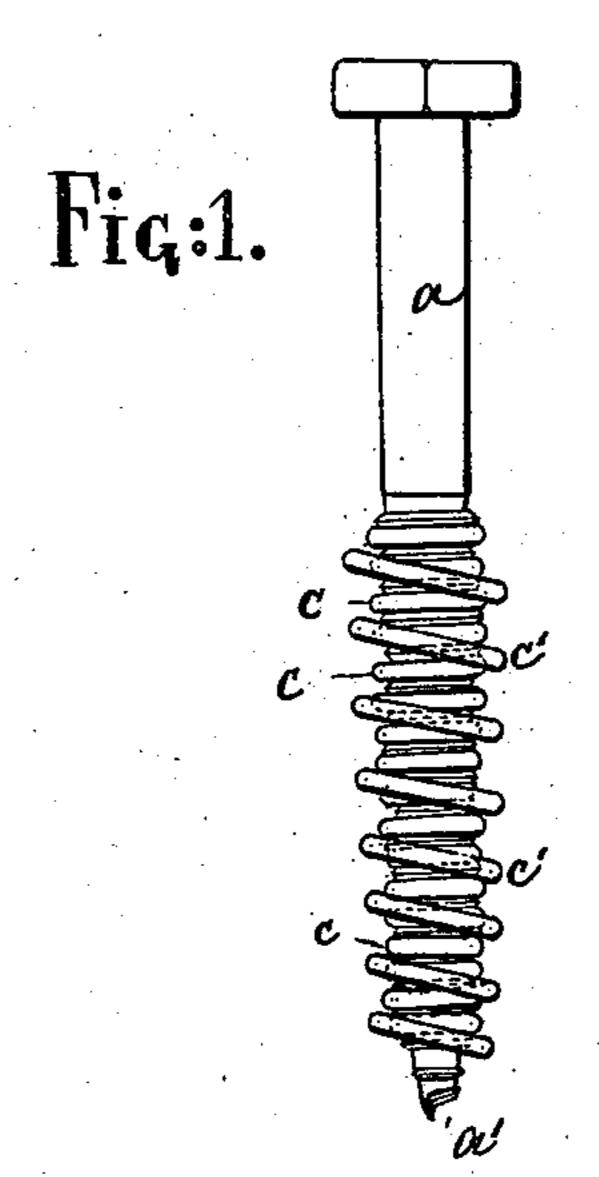
(No Model.)

## J. BOEDDINGHAUS. SCREW FASTENER

No. 556,082.

Patented Mar. 10, 1896.



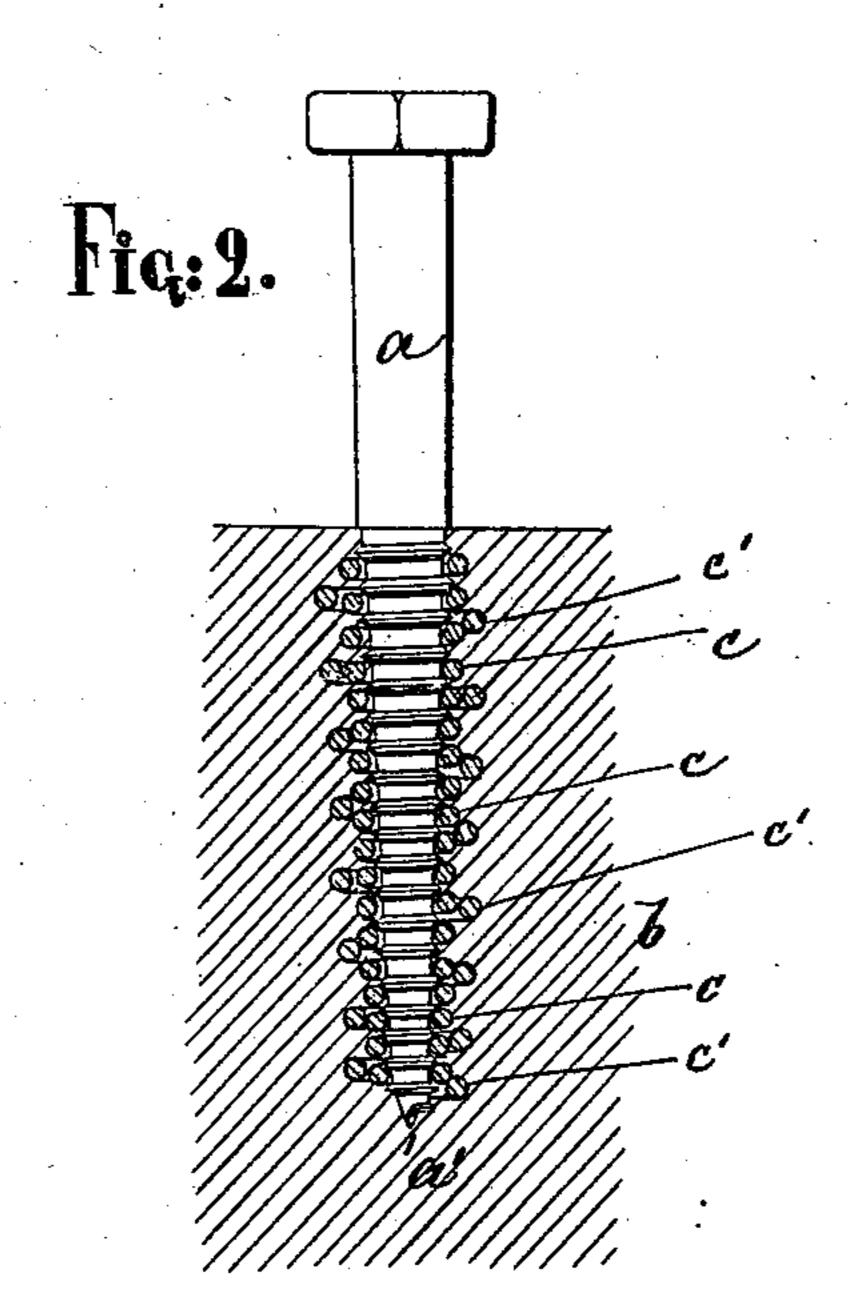
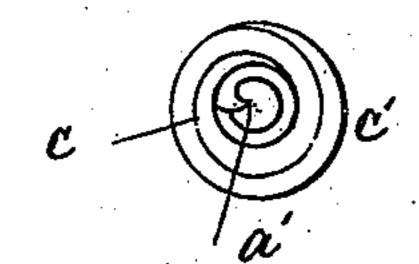


Fig.3.



Witnesses: William Schulz. John Becker

Julius Boeddinghaus by his attorneys Roeder & Briesen.

## United States Patent Office.

JULIUS BOEDDINGHAUS, OF DUSSELDORF, GERMANY.

## SCREW-FASTENER.

SPECIFICATION forming part of Letters Patent No. 556,082, dated March 10, 1896.

Application filed July 13, 1895. Serial No. 555,875. (No model.) Patented in Germany May 10, 1894, No. 78,235; in Belgium July 13, 1894, No. 110,967, and in France July 16, 1894, No. 240,053.

To all whom it may concern:

Be it known that I, Julius Boeddinghaus, a subject of the German Emperor, residing at Dusseldorf, Germany, have invented certain 5 new and useful Improvements in Screw-Fasteners, (for which I have obtained a patent in Germany, No. 78,235, dated May 10, 1894; in France, No. 240,053, dated July 16, 1894, and in Belgium, No. 110,967, dated July 13, 10 1894,) with description as follows.

This invention relates to a fastener for effectively securing the screw-shanks of hooks, eyes, nails, pins, and similar articles to walls or surfaces composed of wood, cast metal, 15 earthenware, clay, glass, or porcelain, with-

out injuring such walls.

In the accompanying drawings, Figure 1 is a perspective view of my improved fastener. Fig. 2 is a longitudinal section thereof; Fig.

20 3, an end view thereof.

The letter a represents a bolt, hook, eye, nail, pin, or other article which is provided with a screw-shank a' adapted to be driven into a wall b. In order to secure this shank to its seat, I employ a spiral wire c, which is of such a diameter and pitch as to engage the bolt a' between its threads. Thus the spiral c constitutes in effect a nut for the bolt. The spiral is provided with a multiple winding, 3° Fig. 2, the outer winding c' being of a greater pitch than the inner winding and serving to

constitute a retaining-surface for securing the spiral to the wall.

In use a hole is bored into the wall, which is a trifle wider than the diameter of the spi- 35 ral. The spiral is then fitted into the hole and secured in place by plaster-of-paris, cement, or other binding material. Finally the shank a' (which may have a suitable head) is screwed into the spiral and will be thus 40 firmly held in place.

If the spiral is to be secured to a body composed of glass, clay, porcelain, earthenware, or cast metal, it is fitted in place while the body is still liquid or plastic, and will thus 45 become permanently attached upon the cooling are at the last and the last are still be also as a setting of are the last are at the last are still be also as a setting of are the last are at last are at the last are at the last are at last

ing or setting of such body.

What I claim is—
The combination of a screw-shank with a nut or fastener composed of a multiple coiled 50 wire, of which the inner winding is of smaller pitch than the outer winding and is adapted to be engaged by the thread of the screw-

shank, substantially as specified.

In testimony whereof I have signed this 55 specification in the presence of two subscribing witnesses.

## JULIUS BOEDDINGHAUS.

Witnesses: Ernest Budré,

WM. ESSENWEIN.