

No. 805,662.

PATENTED NOV. 28, 1905.

F. D. OGDEN.
BOLT ANCHOR.

APPLICATION FILED MAY 20, 1905.

Fig. 1.

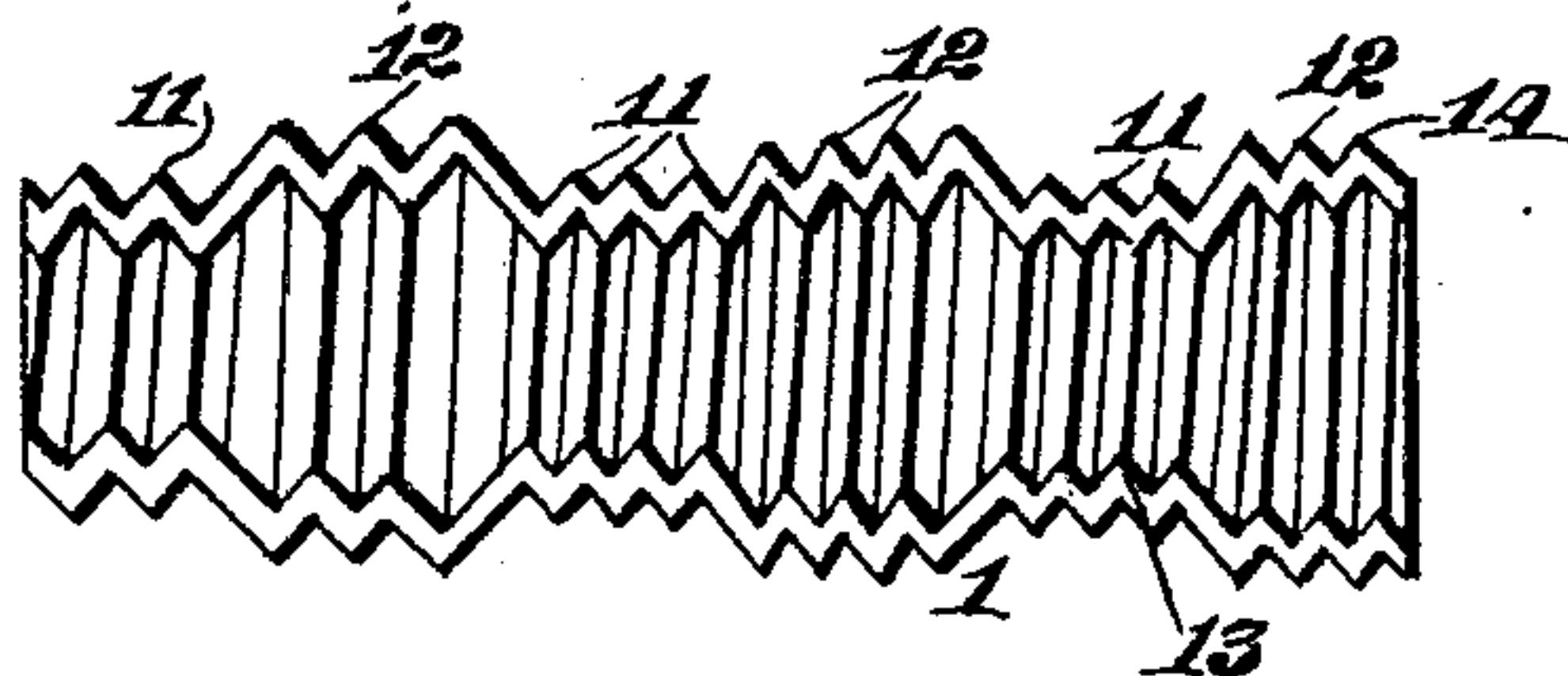


Fig. 2.

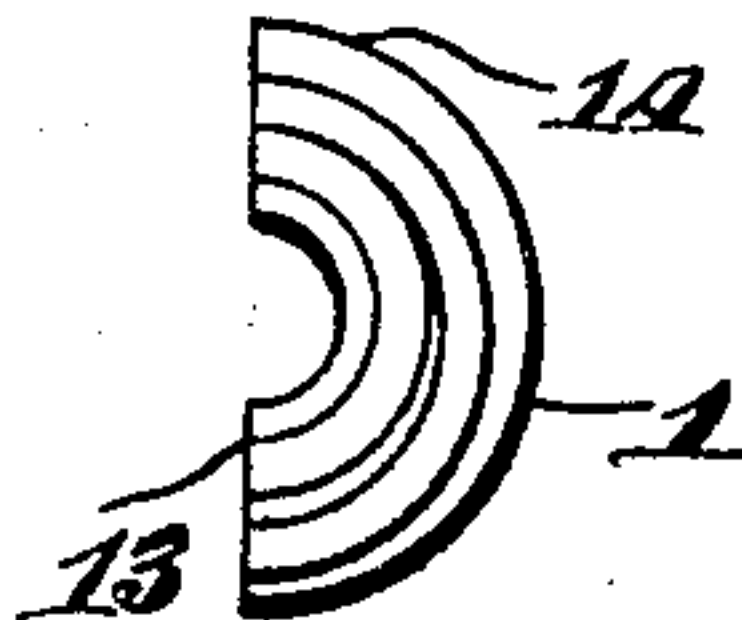
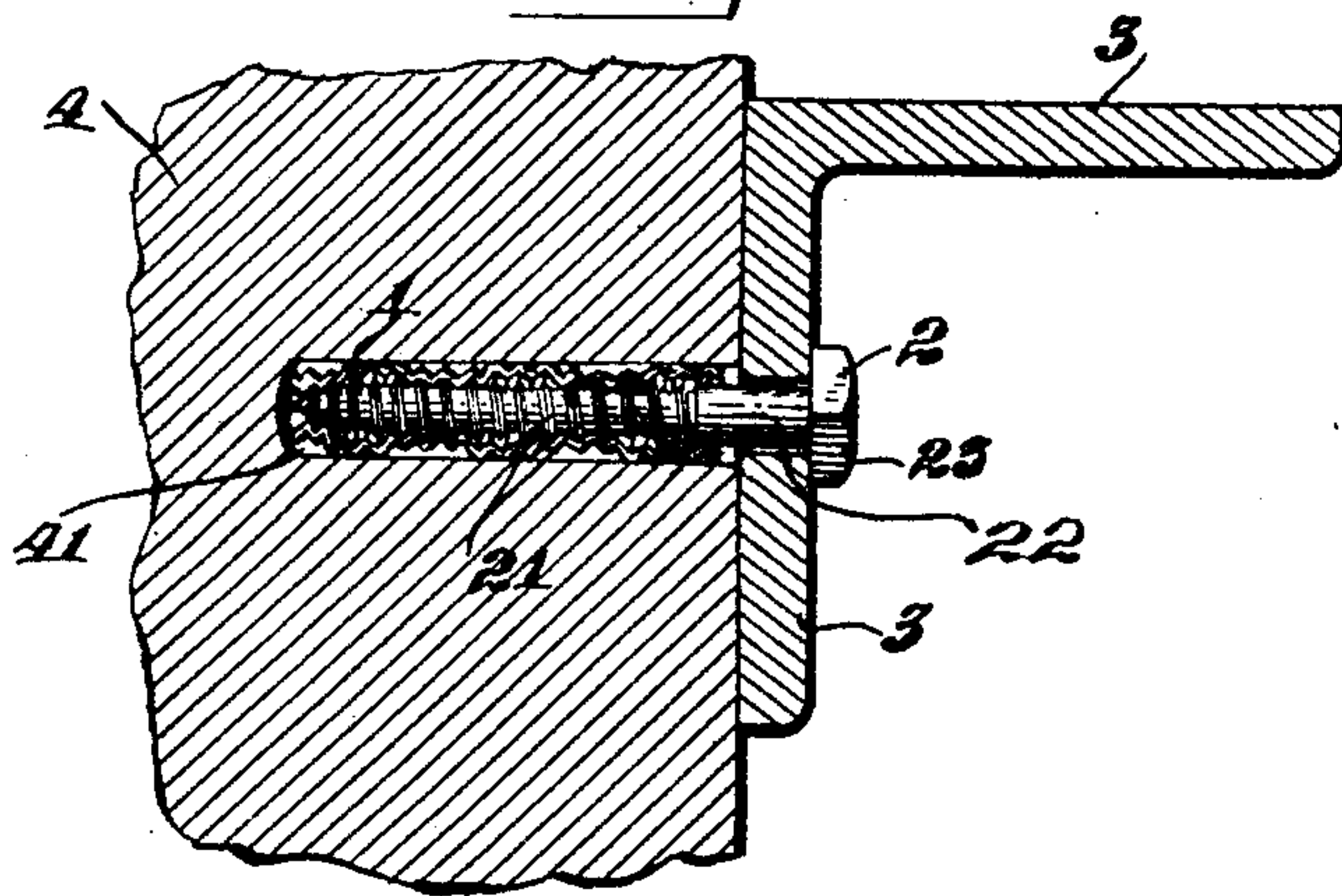


Fig. 5.



Attest:

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UNITED STATES PATENT OFFICE.

FREDRIC D. OGDEN, OF NEW YORK, N. Y.

BOLT-ANCHOR.

No. 805,662.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed May 20, 1905. Serial No. 261,376.

To all whom it may concern:

Be it known that I, FREDRIC D. OGDEN, a citizen of the United States, and a resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Bolt-Anchors, of which the following is a specification.

My invention relates to bolt-anchors such as are used to secure a bolt in a wall of stone, brick, or the like. It provides novel means for engaging the bolt-anchor with the wall of the aperture, at the same time affording a secure engagement for the threads of the bolt.

In the drawings, Figure 1 is an elevation of a bolt-anchor section embodying my invention. Fig. 2 is an end view of the same. Fig. 3 shows the bolt-anchor in operative position and with a bolt engaged therein.

1 designates a bolt-anchor section shown as one of a pair of like sections adapted to inclose a bolt and as provided with alternate portions 11 and 12 of different diameters, the portions 11 being formed with interior spiral corrugations 13, adapted to engage with the thread of a bolt, and the portions 12 being provided with exterior corrugations 14, adapted to bear against the walls of the aperture in which the bolt-anchor is engaged.

2 designates a bolt having a thread 21, smooth end 22, and head 23.

3 designates a bracket shown as held in an aperture 41 in a wall 4 by means of the bolt 2 and anchor 1.

In the particular example of my invention illustrated the anchor-section 1 is made of sheet metal, so that its wall is of approximately even thickness throughout. For this reason the corrugations are produced on both the inner and outer sides of the section. It is obvious, however, that it is the inner corrugations 13 of the smaller alternate portions of the section which have the useful function of engaging with the bolt-threads and the exterior corrugations 14 of the larger portions 12 which are useful to engage the walls of the aperture 41. It will be noted that the corrugations 13 are spirally disposed, so as to form an internal screw-thread when the sections are assembled, and that these threads progressively decrease in diameter from the front to the rear end of the anchor. This construction possesses two advantages—first,

that it enables the anchor to engage with bolts having different numbers of threads to the inch, and, second, that the bolt when screwed home tends to expand the sections 1 very strongly at their inner ends, whereby the outer corrugations 14 are slightly deformed and a very positive engagement of the anchor in the wall is secured. By making one of the larger alternate portions 12 at the forward end of the anchor-sections provision is made for the introduction of the smooth end 22 of the bolt without deforming the interior threads 13.

It is evident that certain mechanical changes may be made in my device without departing from the spirit of the invention.

Without specifying materials or enumerating equivalents, what I claim is—

1. A bolt-anchor section formed with a plurality of interiorly transversely corrugated portions and a plurality of exteriorly-corrugated portions, said portions being alternately disposed, the exteriorly-corrugated portions being of the greater diameter.

2. A bolt-anchor section formed with a plurality of interiorly transversely corrugated portions and a plurality of exteriorly-corrugated portions, said portions being alternately disposed, the exteriorly-corrugated portions being of the greater diameter, and the interior corrugations being spirally disposed.

3. A bolt-anchor section formed with a plurality of portions having interior spiral corrugations of progressively-decreasing diameter from front to rear and a plurality of exteriorly-corrugated portions of greater diameter than said interiorly-corrugated portions said portions being alternately disposed.

4. A bolt-anchor section formed with a plurality of portions having interior spiral corrugations of progressively-decreasing diameter from front to rear and a plurality of exteriorly-corrugated portions of greater diameter than said interiorly-corrugated portions, said portions being alternately disposed and one of said exteriorly-corrugated portions being located at the forward end of the anchor-section.

5. A bolt-anchor section, the wall of which is of approximately equal thickness throughout and interiorly and exteriorly corrugated, the section having alternate portions the in-

terior corrugations of a plurality of which
are adapted to engage a bolt-thread, and a
plurality of other alternately-disposed por-
tions the exterior corrugations of which are
5 adapted to bear against the walls of the aper-
ture in which the anchor is engaged the ex-
teriorly-corrugated portions being of the
greater diameter.

In testimony whereof I have signed this
specification in the presence of two subscrib- 10
ing witnesses.

FREDRIC D. OGDEN.

Witnesses:

EDW. A. STULZ,
J. C. LAING.