A. BEEDHAM.

LOCK JOINT FOR WELL CASINGS.

APPLICATION FILED APR. 5, 1918.

1,287,835.

Patented Dec. 17, 1918.

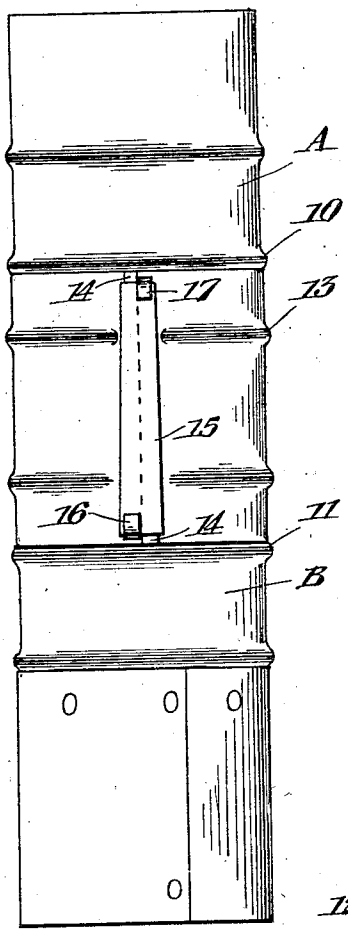


Fig. 1.

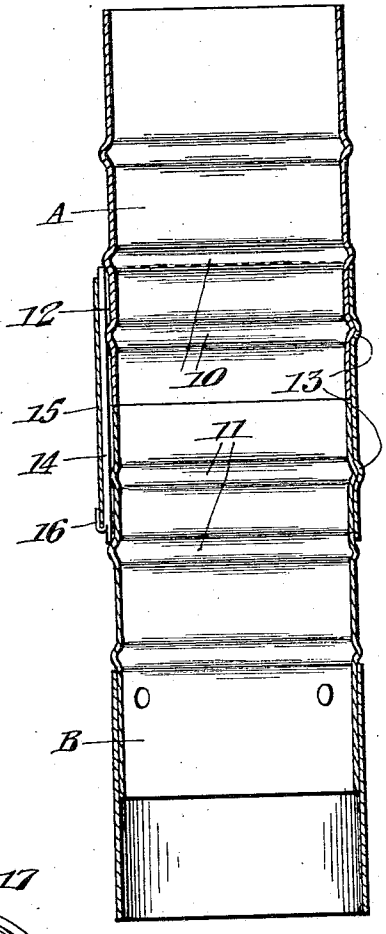


Fig. 2.

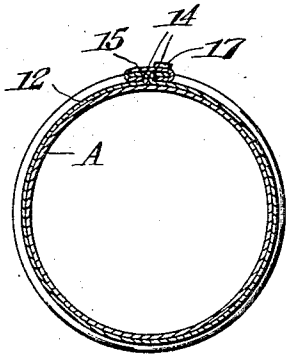


Fig. 3.

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UNITED STATES PATENT OFFICE.

ALBERT BEEDHAM, OF CALGARY, ALBERTA, CANADA, ASSIGNOR OF FORTY-FIVE ONE-HUNDREDTHS TO IDEAL WELL CASING COMPANY, OF CALGARY, ALBERTA, CANADA.

LOCK-JOINT FOR WELL-CASINGS.

1,287,835. Specification of Letters Patent. Patented Dec. 17, 1918.

Application filed April 5, 1918. Serial No. 226,907.

To all whom it may concern:

Be it known that I, ALBERT BEEDHAM, a subject of the King of Great Britain, and resident of the city of Calgary, Province of Alberta, and Dominion of Canada, have invented certain new and useful Improvements in Lock-Joints for Well-Casings, of which the following is a specification.

This invention relates to improvements in lock joints for well casings, and the objects of the invention are to facilitate jointing the several sections so that the casing may be driven without danger of telescoping, to adequately reinforce the several sections of the casing, to permit of the coupling, with which the sections are jointed, being readily tightened during the operation of locking, and generally to adapt the several parts to better perform the functions required of them.

With the above and other objects in view, the invention consists essentially of the improved construction, particularly described and set forth in the following specification and accompanying drawings forming part of the same.

In the drawings:

Figure 1 is a front elevation of a coupling embodying the present invention securing two sections of a well casing in assembled position.

Fig. 2 is a longitudinal section of the same.

Fig. 3 is a transverse section through the coupling and one of the sections.

Like characters of reference refer to like parts in the several figures.

Referring to the drawings, A represents the end portion of one section of a well casing, and B the end portion of an adjacent section of the casing, each end portion being provided with a plurality of annular corrugations 10 and 11.

These end portions A and B butt joint and a metallic coupling 12 is provided having corrugations 13 extending therearound, and adapted to engage with the adjacent corrugations 10 and 11 of the said portions.

The upper and lower edges of the coupling 12 engage with corrugations 10 and 11 so that vertical displacement of the coupling cannot take place even under the most severe conditions to which the casing may be subjected during driving.

The vertical edges of the coupling 12 are bent back to provide flanges 14 as shown in Fig. 3 and these flanges taper from the bottom upwardly as shown in Fig. 1 and are adapted to be pressed together or closed by means of a key 15.

This key 15 is tapered and, on being driven into engagement with the flanges 14 of the coupling 13, will tightly draw the coupling into position and lock the same around the joint of the end portions A and B.

The key 15 has its lateral edges bent in U-formation, so that the vertical edges of the key underlie the flanges 14, and the opposite ends of the flanges are adapted to be bent over the outer face of the key 15, as shown at 16 and 17 forming locking tongues or lugs which prevent the key 15 from becoming displaced during the operation of driving the well casing.

In placing the casing in a well, the end portions A and B of adjacent sections are butted against each other, and the coupling 12 passed around the joint, whereupon the key 15 is engaged with the flanges 14 of the coupling, and as the key is being driven into position, the coupling is tightly closed around the joint, and the corrugations 13 of the coupling will engage with the corrugations 10 and 11 nearest to the joint of the end portions A and B, while the next corrugations 10 and 11 will engage with the upper and lower edges respectively of the coupling 12, and so prevent vertical displacement of the coupling.

When the coupling has been so closed, the tongues 16 and 17 are bent as shown in Fig. 1 to prevent displacement of the key 15, whereupon the casing is ready for driving.

The sections of the well casing may be jointed to the ends A and B, by rivets or the like.

From this description, it will be seen that I have invented a locking joint for sections of well casings, whereby the said sections may be readily assembled with a minimum of time and labor, and the joint so arranged that the casing may be driven into position without fear of telescoping.

As many changes could be made in the above construction and many apparently widely different embodiments of my invention within the scope of the claim, constructed without departing from the spirit

or scope thereof, it is intended that all matter contained in the accompanying drawings and specification shall be interpreted as illustrative and not in a limiting sense.

What I claim as my invention is:

A split coupling having the vertical edges flanged, a tapered key adapted to engage with the said flanges to close the same together and lug means on the flanges designed to be bent over the key to prevent displacement of the same.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

ALBERT BEEDHAM.

Witnesses:
A. HARRIS,
T. R. MICHEL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."