No. 669,129. Patented Mar. 5, 1901.

J. M. STUKES.

WELL CASING.

Application filed Dec. 18, 1900.

(No Model.)

Fig. 1.

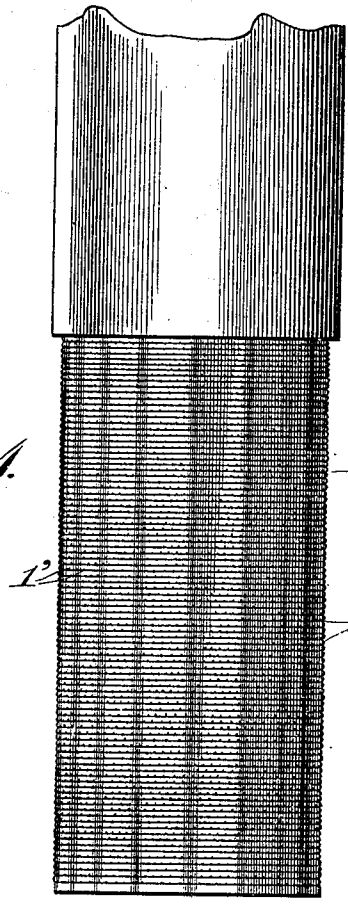


Fig. 2.

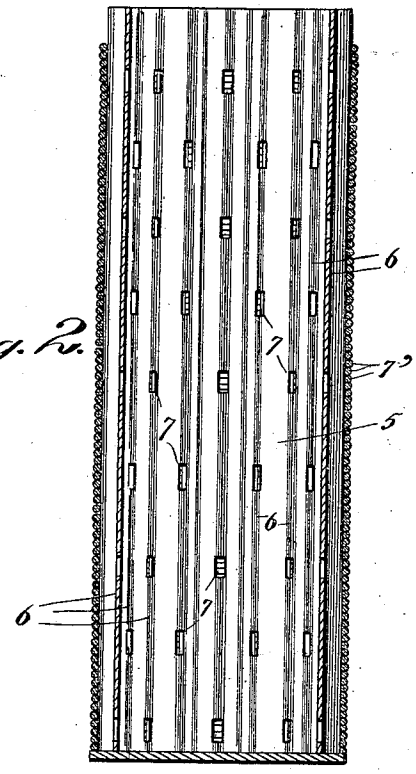


Fig. 3.

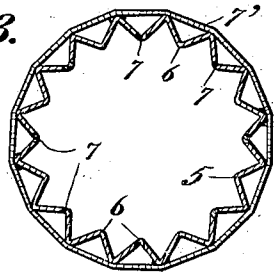


Fig. 4.

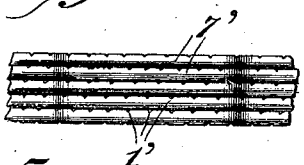
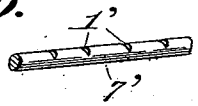


Fig. 5.



Witnesses
C. H. Walker.
Geo. T. Chamberlin

J. M. Stukes, Inventor.
by Cashow & Co.
Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN MARION STUKES, OF SNYDER, TEXAS, ASSIGNOR TO M. G. BUCHANAN, OF ODESSA, TEXAS.

WELL-CASING.

SPECIFICATION forming part of Letters Patent No. 669,129, dated March 5, 1901.

Application filed December 18, 1900. Serial No. 40,306. (No model.)

To all whom it may concern:

Be it known that I, JOHN MARION STUKES, a citizen of the United States, residing at Snyder, in the county of Scurry and State of Texas, have invented a new and useful Well-Casing, of which the following is a specification.

This invention relates to well-casings in general, and more particularly to the strainers thereof, one object of the invention being to provide a strainer which will be so rigid as not to be injured so easily as the ordinary strainer made of wire-netting, a further object of the invention being to provide a construction which will, while permitting ingress of water, efficiently exclude foreign matter.

Additional objects and advantages of the invention will be evident from the following description:

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is an elevation showing the exterior of a portion of a well-casing including the present strainer. Fig. 2 is a central longitudinal section of the strainer. Fig. 3 is a transverse section of the strainer. Fig. 4 is an enlarged elevation of a portion of the exterior of the strainer and showing the knurled structure thereof. Fig. 5 is a detail perspective view showing a portion of the serrated wire from which the helix is wound.

Referring now to the drawings, it will be seen that the present casing comprises a generally cylindrical drum or casing-section 5, which is cross-sectionally corrugated, the casing-section being preferably of galvanized iron, although it may be of other material, and the sides of the corrugations of which are straight, as shown, so that there are provided a series of narrow longitudinal ribs 6, extending throughout the length of the casing-section.

In the inner angles of the corrugations of the section 5 there are formed series of openings 7, which communicate the interior with the exterior of the casing-section.

From one end to the other of the casing-section 5 there is wound a continuous helix 7′ of wire, the successive convolutions of which lie one close against the other, and to permit of passage of water between these convolutions one side of the wire is knurled or has transverse serrations 1′.

The wire helix upon the casing-section incloses a series of compartments between it and the walls of the corrugations, and with these compartments the serrations of the wire helix communicate, these compartments being in turn in communication with the interior of the casing-section through the openings 7, as will be readily seen.

The lower end of the casing-section 5 may be closed, as shown, and the upper end thereof may be connected with the casing-section next above in any desired manner, so that water in the well in order to enter the casing must pass through the serrations of the wire, and these serrations being exceedingly small foreign matter is excluded. A screen for this purpose must be fine; but to make a fine woven screen fine wire must be used, which is not durable. With the present structure both fineness of opening and durability are secured. Furthermore, with the angular corrugations shown a minimum amount of the wire is covered by the casing, and hence a greater straining-surface is presented.

What is claimed is—

1. A well-casing comprising a cross-sectionally-corrugated tubular section the outer edges of the corrugations of which are angular, openings leading into the section through the inner angles of the corrugations, and a serrated wire wound continuously upon the casing-section with its convolutions in contact.

2. A well-casing comprising a cross-sectionally-corrugated tube the faces of whose corrugations are flat to present angular inner and outer edges, said tube having openings through the inner angles of the corrugations, and a wire wound helically upon the tube with its convolutions in contact, one side only of the wire being serrated to present interstices of equal dimensions.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN MARION STUKES.

Witnesses:
S. H. COWAN,
S. H. BURNEY.