(No Model.)

A. D. COOK.

WELL STRAINER.

No. 455,307. Patented July 7, 1891.

Fig. 4

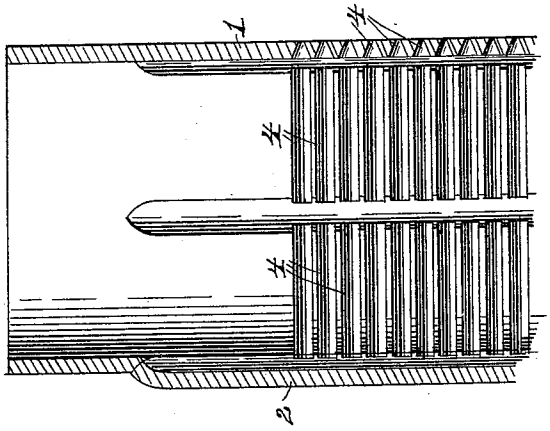


Fig. 3

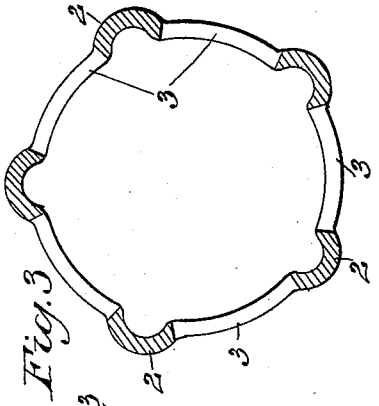


Fig. 2

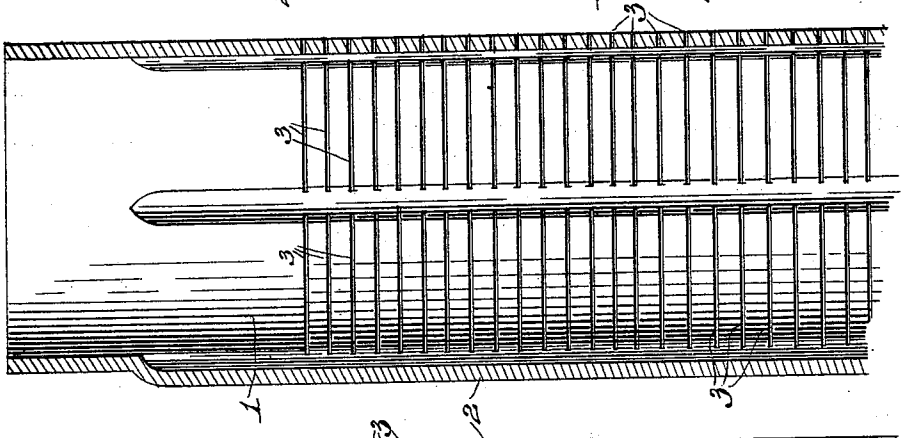
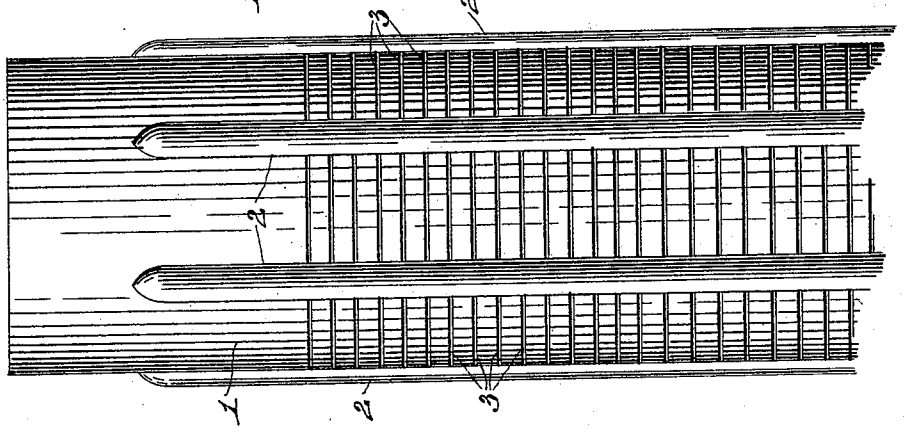


Fig. 1



Witnesses

Wm. Bagger

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By his Attorneys,

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

UNITED STATES PATENT OFFICE.

AUGUST D. COOK, OF LAWRENCEBURG, INDIANA.

WELL-STRAINER.

SPECIFICATION forming part of Letters Patent No. 455,307, dated July 7, 1891.

Application filed January 27, 1891. Serial No. 379,294. (No model.)

To all whom it may concern:

Be it known that I, AUGUST D. COOK, a citizen of the United States, residing at Lawrenceburg, in the county of Dearborn and State of Indiana, have invented a new and useful Strainer for Wells, of which the following is a specification.

This invention relates to tubular strainers for deep wells; and it has for its object to provide a device of this class which shall be simple in construction, durable, and effective in operation.

The device consists, essentially, of a metallic tube provided with exterior ribs or corrugations and having slits or openings formed therein, substantially as will be more fully hereinafter described, and pointed out in the claim.

In the drawings hereto annexed, Figure 1 is a side view of a portion or section of a tubular strainer constructed in accordance with my invention. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a cross-section. Fig. 4 is a longitudinal sectional view illustrating a modification.

Like numerals of reference indicate like parts in all the figures.

The body of my improved strainer consists of a metallic tube 1 of suitable dimension, which is provided with a series of longitudinal ribs or corrugations 2, which are preferably parallel to each other and which may be located at any desired distance apart. The body of the tube 1 is provided with a series of concentric segmental slits or openings 3, which may be formed by cutting or sawing them in any suitable manner from the inside of the tube after the latter has been corrugated to form the exterior ribs 2. In practice the lower end of the strainer-tube is closed and its upper end is to be connected to the lower end of the well-casing into which the water is admitted through the slits or openings 3. The exterior ribs 2 serve to brace and strengthen the tube and also to some extent to keep the sand and gravel at a distance from the walls of the latter. By forming the ribs exteriorly upon the tube I am enabled to cut the slits or openings 3 from the inside of the latter, thus insuring a neat finish which is very essential, where, as is usually the case, the said slits must be exceedingly narrow in order to prevent fine sand and gravel from entering. It is not essential that the ribs or corrugations shall be extended throughout the entire length of the tube, the upper portion or end of the same being sometimes left plain for the more convenient attachment to the well-casing.

In Fig. 4 I have shown a modification, which consists in gouging out the material of the tube, so as to bevel the inner walls of the slits or openings 3, as will be plainly seen at 4, in Fig. 4 of the drawings. By this construction sand and the like is effectually prevented from lodging in the slits or openings 3.

The operation and advantages of my invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed.

The construction of my improved strainer-tube is exceedingly simple, and it will be found to be very durable and capable of resisting any pressure and any wear to which it may be ordinarily subjected.

Having thus described my invention, what I claim is—

A well-strainer comprising a metallic tube of uniform thickness throughout, creased or corrugated to form a series of longitudinal ribs upon its outer side and corresponding indentations in its inner side, the spaces between the said ribs being provided with segmental slits or openings extending through the entire thickness of the tubular casing, substantially as set forth.

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

AUGUST D. COOK.

Witnesses:
J. F. COOK,
CHARLES L. SKINNER.