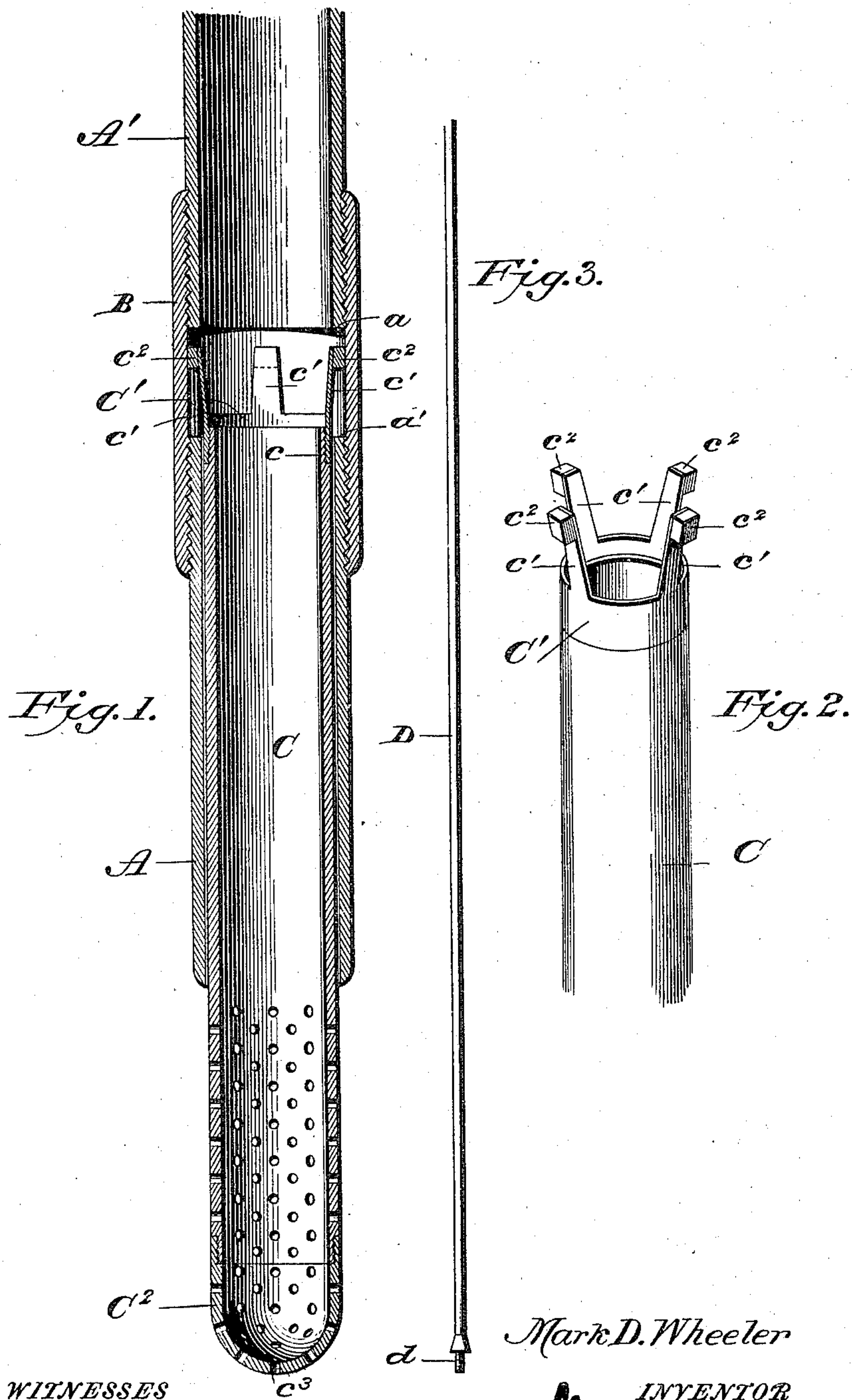


(No Model.)

M. D. WHEELER.
STRAINER FOR ARTESIAN WELLS.

No. 572,848.

Patented Dec. 8, 1896.



WITNESSES
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UNITED STATES PATENT OFFICE.

MARK D. WHEELER, OF REDFIELD, SOUTH DAKOTA.

STRAINER FOR ARTESIAN WELLS.

SPECIFICATION forming part of Letters Patent No. 572,848, dated December 8, 1896.

Application filed November 9, 1895. Renewed November 12, 1896. Serial No. 611,906. (No model.)

To all whom it may concern:

Be it known that I, MARK D. WHEELER, a citizen of the United States of America, residing at Redfield, in the county of Spink and State of South Dakota, have invented certain new and useful Improvements in Strainers for Artesian Wells; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide means for attaching a strainer to the lower section of a drilled well after the well-tube has been placed in position.

To this end my invention consists in the combination of a well-tubing having a coupling for connecting the lower section to the section above in such manner as to provide an annular recess forming shoulders, together with a strainer having spring-arms at its upper end for engagement with the shoulders, and a lower perforated section adapted to extend below the lower end of the well-tubing, as will be hereinafter set forth, whereby the strainer can be placed in position after the well-tubing is in place.

In the accompanying drawings, forming part of this specification, Figure 1 is a vertical sectional view of the well-tubing, showing the strainer applied thereto. Fig. 2 is a perspective view of the upper part of the strainer, and Fig. 3 is a side elevation of the bar which is employed for placing the strainer in the well-tubing.

In the drawings I have shown the lower part of a well-tubing, in which the lower section A is threaded at its upper end to receive a coupling B, said coupling being internally threaded at both ends to engage the section A and section A' above. When the sections A and A' are coupled to each other by the sleeve or coupling B, there will be an annular space left between the adjoining ends of said sections, forming shoulders *a* and *a'*, the annular space or recess being occasioned by the interior diameter of the coupling being greater than the interior diameter of the well-

tubing. The lower section A of the well-tubing is preferably made of steel.

C designates the strainer, which is of slightly less diameter than the internal diameter of the well-tubing, and the upper end of this strainer is cut away and threaded at *c* to receive a metallic thimble C', having upwardly-projecting arms *c'*, which are bent outward. To the upper ends of the arms *c'*, on their outer sides, are attached blocks *c²* which, when the strainer is placed in the well-tubing, as hereinafter set forth, lie in the annular space or recess between the ends of the sections A and A' and prevent the strainer from becoming displaced.

The lower part of the strainer C, which extends beyond the lower end of the well-tubing, is perforated, as shown, and the end is preferably removable, and for this purpose the end section C² is provided, having its upper end threaded to engage with threads at the lower end of the main or body portion of the strainer.

The strainer hereinbefore described is simple and cheap in construction and can be readily placed in position in the well-tubing after the latter has been sunk into the ground to the proper depth. In applying the strainer to the well-tubing it is placed in the upper end of said tubing and forced down until the blocks *c²*, which are on the ends of the spring-arms *c'* and bear against the inner side of the tubing, reach the annular space or recess between the adjoining ends of the sections A and A', when they will move into said recess and prevent a further movement of the strainer in either direction, the perforated end of the strainer being then located beyond the lower end of the well-tubing.

D designates a tool which I employ in forcing the strainer down in the well-tubing, said tool consisting of a rod, either a single piece or jointed, which is provided at its lower end with a reduced threaded portion *d*, which engages a threaded aperture *c³* in the lower end of the strainer, so that after the strainer has been placed in position the rod can be turned to disengage it from said aperture.

I am aware that prior to my invention it has been proposed to recess or shoulder the lower section of a well-tubing, so as to provide

a rest or seat for the strainer, and I therefore lay no claim, broadly, to such construction; but

What I claim as new, and desire to secure by Letters Patent, is—

5 The combination with a well-tubing having sections A and A' connected to each other by a coupling B so as to leave an annular space between the adjoining ends of said sections; of a strainer consisting of the part C the lower
10 portion of which is perforated and provided with a threaded aperture, the upper end of the part C being threaded; together with a

threaded sleeve or thimble C' in engagement with the upper end of the part C and having upwardly and outwardly projecting spring- 15 arms c' with blocks or heads at their free ends, substantially as shown and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

MARK D. WHEELER.

Witnesses:

WM. A. MORRISON,
L. J. LUCK.