S. P. COLGAN & W. FREDERICK.

DEVICE FOR RECOVERING PIPES, SHAFTS, &c., FROM WELLS.

APPLICATION FILED JULY 25, 1916.

1,223,034.

Patented Apr. 17, 1917.

2 SHEETS—SHEET 1.

FIG. 1

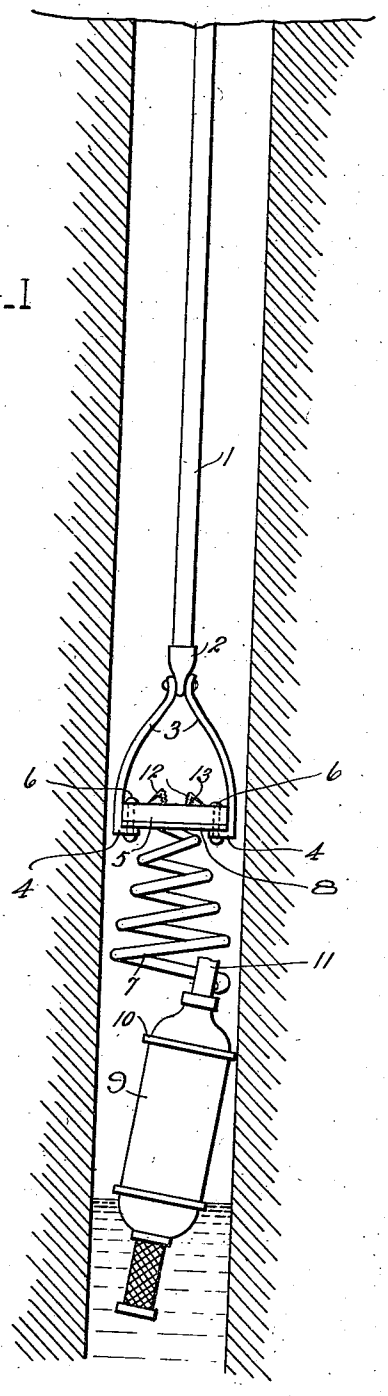
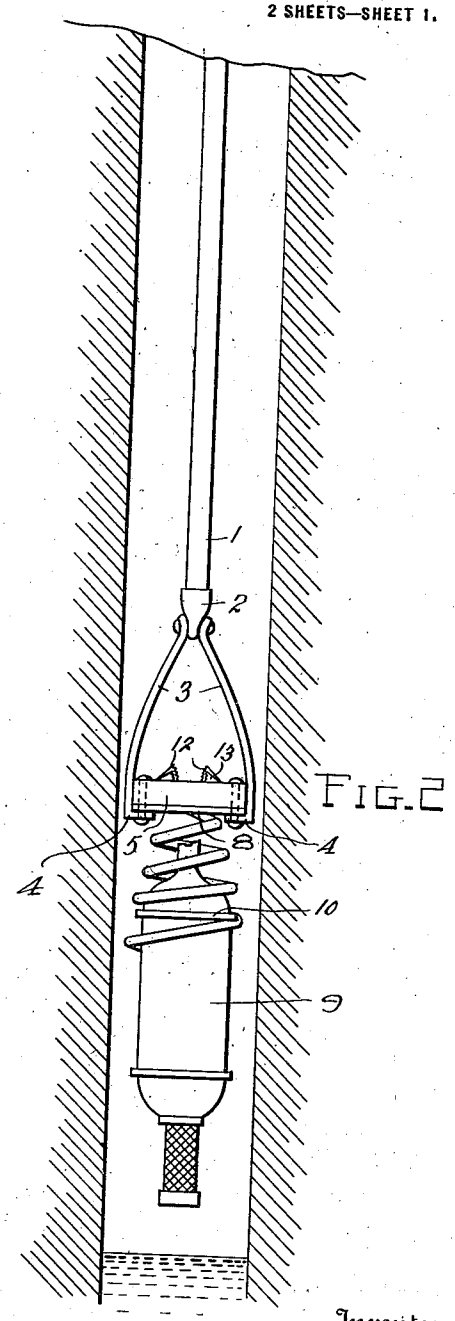


FIG. 2



Inventors

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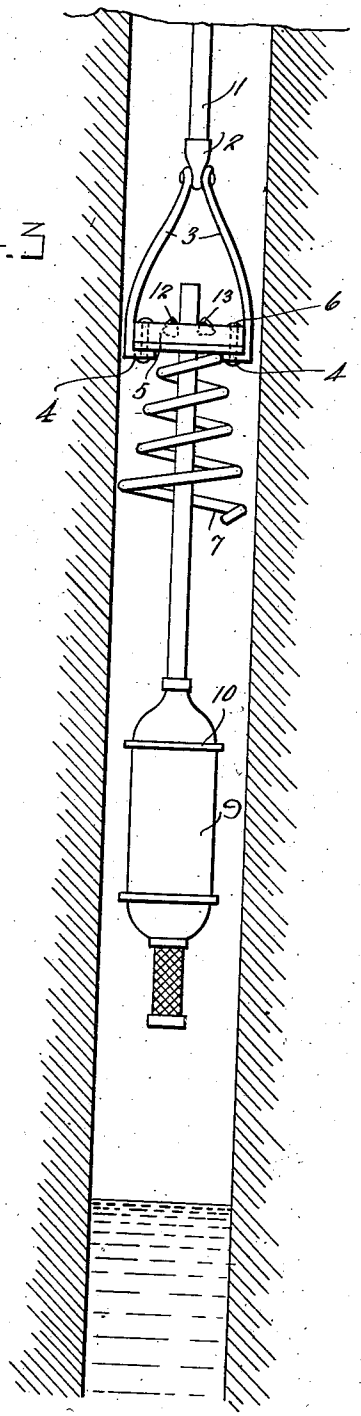
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2 SHEETS—SHEET 2.

FIG. 3



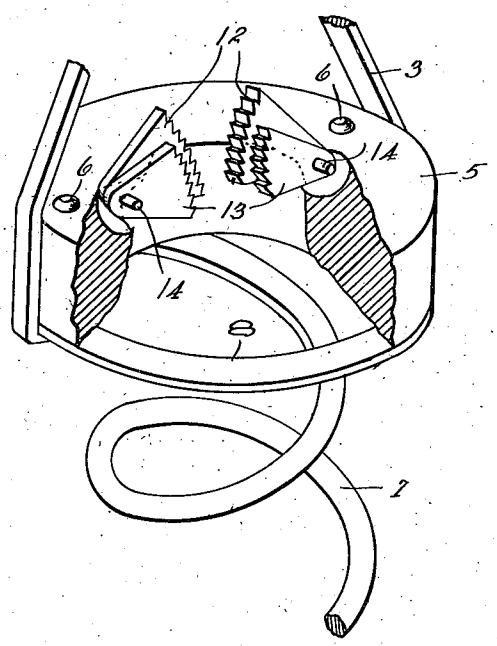


FIG. 4

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UNITED STATES PATENT OFFICE.

SETH P. COLGAN AND WALTER FREDERICK, OF BEAVER CITY, NEBRASKA.

DEVICE FOR RECOVERING PIPES, SHAFTS, &c., FROM WELLS.

1,223,034. Specification of Letters Patent. Patented Apr. 17, 1917.

Application filed July 25, 1916. Serial No. 111,137.

To all whom it may concern:

Be it known that we, SETH P. COLGAN and WALTER FREDERICK, citizens of the United States, residing at Beaver City, in the county of Furnas and State of Nebraska, have invented certain new and useful Improvements in Devices for Recovering Pipes, Shafts, &c., from Wells, of which the following is a specification.

The present invention relates to devices for locating and removing lost pipes, or drills, in well-boring operations, and consists in the arrangements and combinations of parts hereinafter described and particularly set forth in the accompanying claims.

The invention has for its purpose to provide a pipe, or drill, gripping device, designed to fit pipes or rods of different sizes, having means for locating and guiding to the gripping members, the pipe or drill to be removed, and which guiding means serves as an auxiliary to engage with and securely hold for removal, the cylinder of the water pipe when the pipe itself has broken off too near its point of connection with the cylinder to be engaged.

The further purpose of the invention is to produce an article of this character which is of simple and inexpensive construction, and which will not require any appreciable degree of expertness for its operation.

The invention is shown by way of illustration in the accompanying drawings, wherein,

Figure 1 shows the device in operation for finding the cylinder of a water pipe to remove the same,

Fig. 2 shows the cylinder secured for removal,

Fig. 3 illustrates the application of the device for removing a pipe, and

Fig. 4 is a detail perspective view, partly broken away, of the pipe gripping dogs and guide carrying member.

Referring to the construction in further detail and with like reference characters indicating corresponding parts. 1 designates a supporting rod or shaft, having an end piece 2, on which is mounted a pair of curved arms 3, whose lower ends are inturned as at 4, providing a pair of supporting members. A block 5 is mounted on said supporting members 4 and secured thereto by the bolts 6, or in any suitable manner; and said block 5 is centrally apertured (see Fig. 4) to receive the pipe end, as shown in Fig. 3.

A conical and spiral member 7 is secured at one end, 8, to the underside of the block 5, and said end of the spiral engages between the block 5 and the ends 4 of the supporting arms 3, and the pair of securing bolts 6 pass through said spiral end. The conical member 7 serves as a finder or means for locating the part to be removed, and when the pipe end 11 has broken off too near the water cylinder 9 to be itself engaged, as illustrated in Fig. 1, the coils of said spiral member engage with the rib 10 of the cylinder for a suitable number of turns of the shaft 1, when the cylinder, together with its connected parts, may be withdrawn from the well shafting.

The block 5 carries two pairs of independently mounted dogs 12 and 13, of relatively different sizes, adapted to engage with the pipe 11, when the same is of sufficient length; and in this instance, the pipe end is guided by the spiral 7, through turning the shaft 1, to pass through the central aperture of the block 5. When the pipe end has passed through said block aperture, the dogs are brought into engagement therewith by lifting on the supporting shaft 1, as will be understood.

It will therefore be seen from the foregoing, that a combination device is provided for finding and removing a lost pipe or shaft in a well, or for finding and removing the cylinder usually carried by such pipes and which is ordinarily too large to be recovered by articles of this character now in use.

It is obvious that those skilled in the art may vary the details of construction and arrangement of parts without departing from the spirit of my invention, and therefore we do not wish to be limited to such features except as may be required by the claims.

Having thus fully described our said invention, what we claim as new and desire to secure by Letters Patent, is:

1. A device of the character described comprising a supporting rod, a pair of arms connected to said rod, an apertured block mounted on said arms, and two pairs of gripping dogs of different sizes independently mounted on said block adapted to engage with pipes of different diameters for

removing the same from a well, substantially as described.

2. A device of the character described comprising a supporting rod, a pair of arms connected to said rod, an apertured block mounted on said arms, two pairs of gripping dogs of different sizes independently mounted on said block adapted to engage with pipes of different diameters to remove the same from a well, and a conical spiral member having one end thereof secured to said block adapted to engage with and guide the pipe end to be engaged by said gripping dogs, substantially as described.

In testimony whereof we affix our signatures in the presence of two witnesses.

SETH P. COLGAN.
WALTER FREDERICK.

Witnesses:
W. H. GARNETT,
H. B. HALL.