(No Model.)

F. A. BARRETT.

SPECIAL POINT FOR TUBULAR WELLS.

No. 492,181. Patented Feb. 21, 1893.

Fig 1

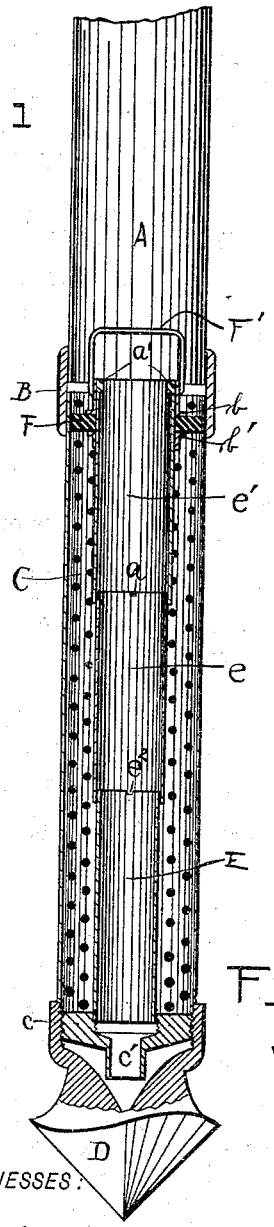


Fig 2

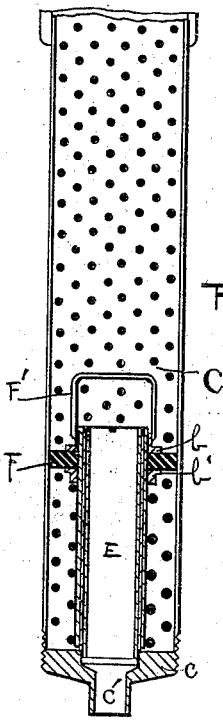


Fig 3

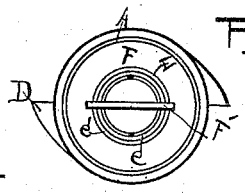
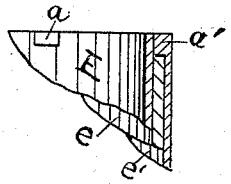


Fig 4



WITNESSES:

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SPECIAL POINT FOR TUBULAR WELLS.

SPECIFICATION forming part of Letters Patent No. 492,181, dated February 21, 1893.

Application filed August 26, 1892. Serial No. 444,238. (No model.)

To all whom it may concern:

Be it known that I, FRANK A. BARRETT, of Newman Grove, in the county of Madison and State of Nebraska, have invented certain useful Improvements in Special Points for Tubular Wells; and I do hereby declare that the following is a full, clear, and exact description thereof, 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, which form a part of this specification.

This invention relates to a special point for tubular wells, the object being to provide a special point by means of which the operator may sink the point at any suitable distance, try for water, and if unsuccessful, readjust the point and sink at any lower depth.

In the accompanying drawings Figure 1 shows a sectional elevation of a special point embodying my invention, illustrating the point in its upper closed position; Fig. 2 shows the point with the auger head removed and in an open position; Fig. 3 shows a top view of Fig. 2, while Fig. 4 shows a broken section of the upper end of the telescoping tubes when in their locked position, as will be described more fully hereinafter.

A represents an ordinary stand pipe, as usually employed in tubular wells, the lower end of which is threaded and provided with the collar B. This collar is also adapted to hold the special tube C, so connected that the tubes A and C are united and form a continuous pipe. The special tube C is suitably perforated, and at the lower end is provided with the threaded cap plate *c*, forming part thereof, and which is provided with an extending nozzle *c'*, as shown in Fig. 2. To this lower cap plate *c* is next attached the hollow auger head D, which is of any suitable size or configuration. Centrally and upon the interior the cap plate *c* is provided with a threaded opening, preferably a little larger in diameter than the nozzle *c'* within which the lower section of the telescoping valve tubes E are removably held. This telescoping valve tube properly comprises the three sections E, *e*, *e'*, which are connected so as to form a telescope in the usual manner. The section E of this tube is provided at the upper end with a small notch e^2, which is adapted when the tubes are telescoped to hold the lug *a* of the tube *e*. The tube *e* however, is also provided with notches similar to those within the tube E, which are adapted to contain the lugs *a'* of the upper sectional tube *e'*, so that when all the tubes are telescoped, as shown in Fig. 2, each two lock within the other. The upper tube *e'* is provided with the collars *b*, *b'* between which the rubber or leather washer F is securely held. This washer F is of a suitable thickness and is adapted to snugly and tightly fit within the perforated tube C, and when the telescoping tubes are drawn in their upward position, the washer is to be held beyond the perforations, so as to completely cut off the lower section of this tube C. At the upper end the tube *e'* is further provided with an ordinary rectangular handle or bail F' of suitable strength, which is secured thereto by any suitable means.

Now, when all the parts have been properly arranged, the operation of my device would be as follows: The special point D would be forced into the earth by man, horse, or any other power, and attached to the tube C and one of the sectional stand pipes A, which latter pipe would be held and suspended by means of a derrick, as is usual in devices of this class. The point would now be forced in the ground in the usual way and the water be forced down the stand pipes A. The water would escape from the pipe A into and through the telescoping tubes E, *e*, *e'*, and find an outlet through the lower nozzle *c'* finally escaping through the wings of the auger head, as in all devices of this class. Now, after the point had been sunk a suitable distance and it were desired to ascertain if water had been struck, it would be simply necessary to drop an ordinary hooked pole down the tube A and force down the telescoping tubes *e*, *e'* into the position as shown in Fig. 2. The water of course in the stand pipe would then have been turned off, so that if there were any water in the strata reached surrounding the perforated tube C, this water would enter the tube C through the perforations above the washer F, and so gradually rise to the surface. If the water came out with sufficient force, of course the operation would have been performed;

but, if, however, no water had been struck, it would be simply necessary to drop a hooked rod and engage the handle F′ of the telescoping tube and again extend these telescoping tubes into their upper position, so as to again make the lower sections of the telescoping tubes a part of the stand pipe A, when the operation could again be continued until the proper water force had been obtained. After the well had been sunken a suitable distance, it would simply be necessary to again force down a hooked rod and engage the handle F′, when the hooked pole could be turned to the left so as to unscrew the telescoping tubes, which could then be drawn to the surface and used in connection with another well. It will be noticed that by means of this special point experiments could be made at any distance by simply opening or closing the telescoping tubes, which act in the capacity of a valve.

The device is simple and readily adjustable and can be attached and used in combination with any tubular well.

Having thus described my said invention, what I claim as new, and desire to secure by United States Letters Patent, is—

In a special point for tubular wells, the combination with the stand pipe A provided with the perforated special tube C threaded at each end, of the hollow auger head D secured to said tube C, provided with a threaded cap seat, the nozzle cap *c* within said threaded seat provided with a central threaded escape way, the telescoping valve tubes E, *e*, *e′*, the lower tube E threading within the escape way of the cap *c* and provided with a notch e^2 adapted to accommodate the lug *a* of the tube *e*, the tube *e* being provided with a notch at its upper end adapted to hold the lug *a′* of the tube *e′*, so that when said tubes are telescoped or closed, they lock one within the other, the tube *e′* being provided with the collars *b*, *b′*, securing the washer F, adapted to snugly work within the tube C, and the bail F′ secured to the tube *e′* to operate said sections, all substantially as and for the purpose set forth.

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

FRANK A. BARRETT.

Witnesses:
D. V. ELLSWORTH,
H. M. BETHEL.