

R. Mc. Grath,
Ejecting Pump,
No. 47,654, *Patented May 9, 1865.*

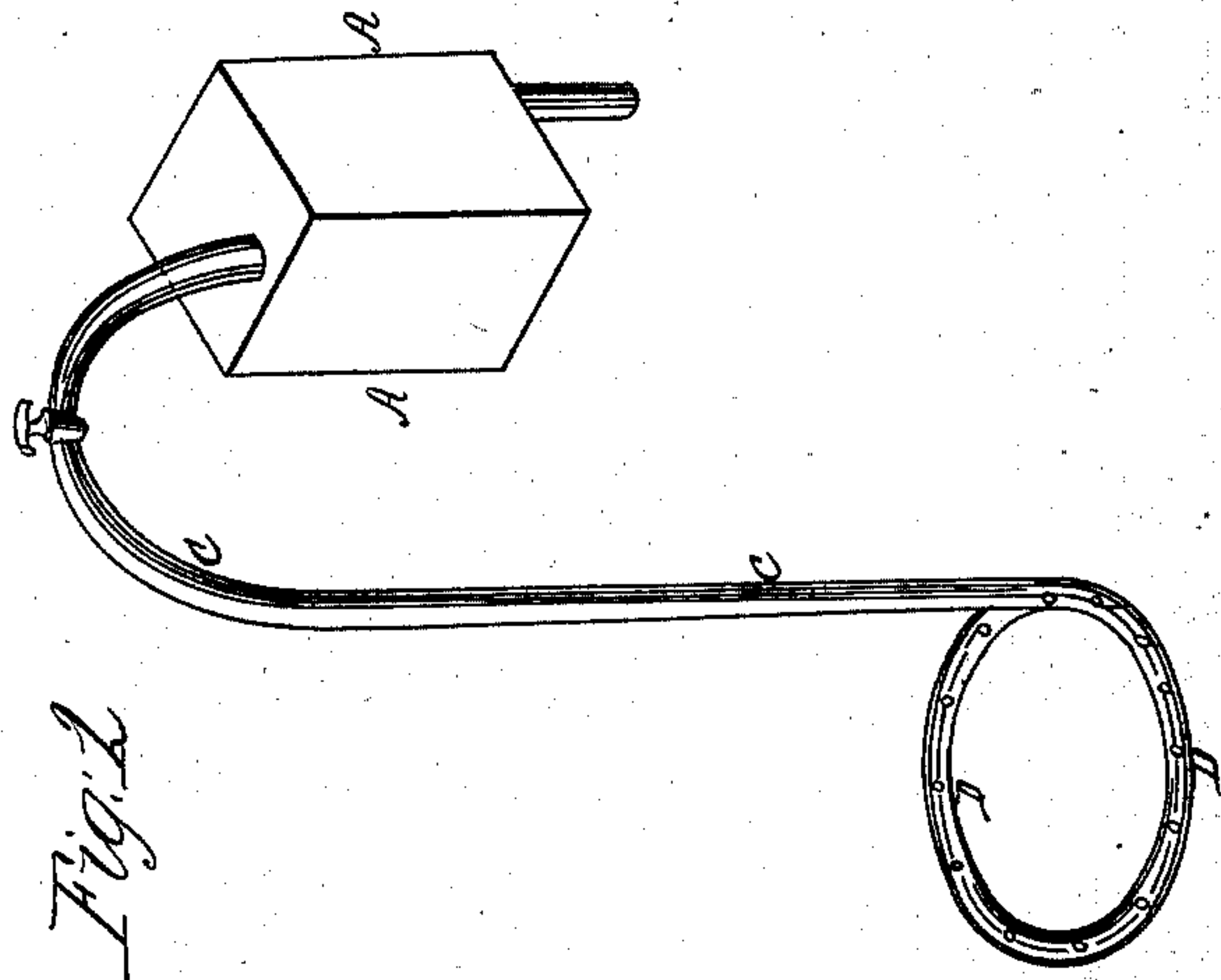


Fig. 2

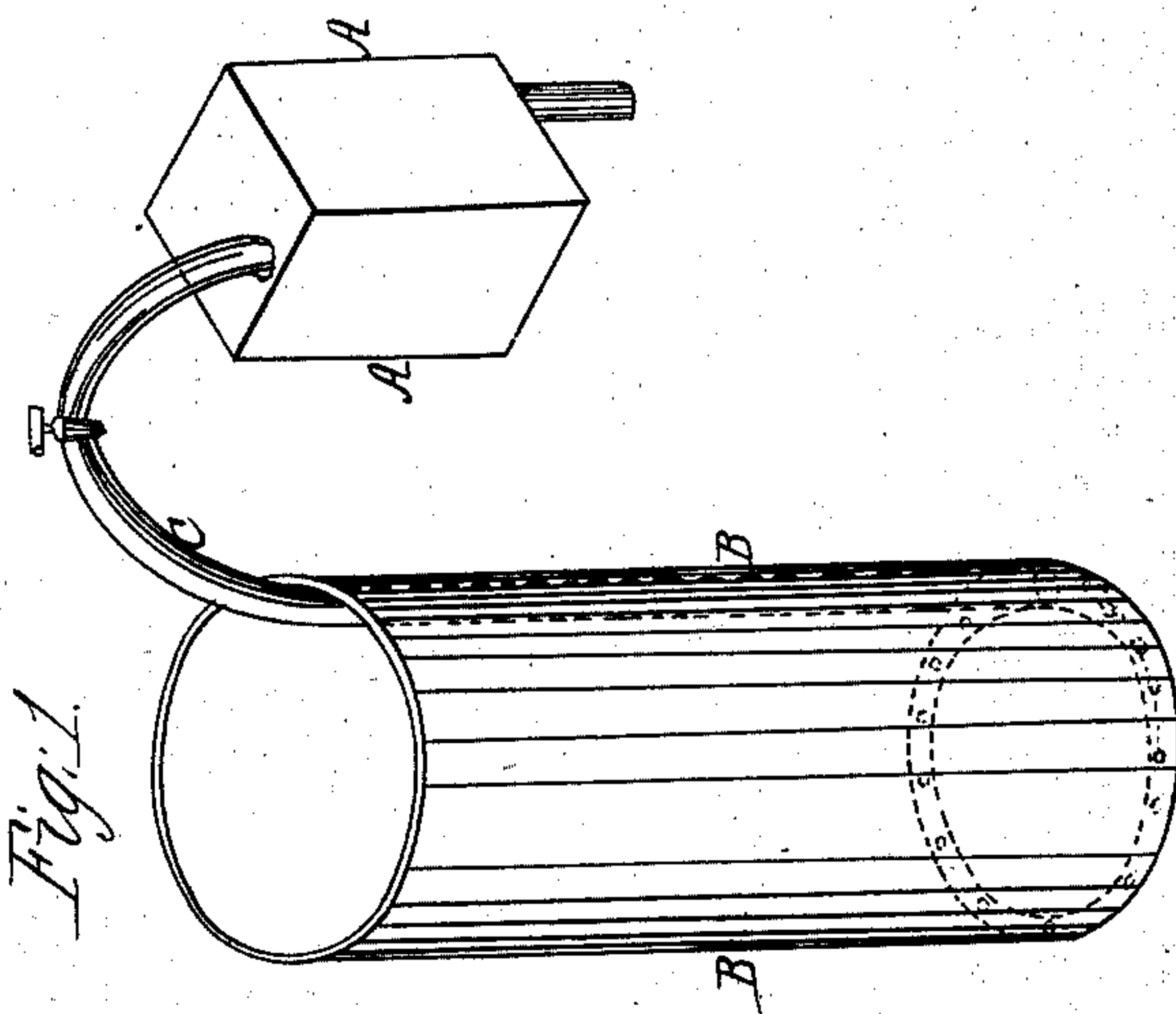


Fig. 1

Witnesses:

D. E. Castle
Wm. S. Mc. Kenney

Inventor:

Robert Mc. Grath

UNITED STATES PATENT OFFICE.

ROBERT McGRATH, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN FLUID-EJECTORS.

Specification forming part of Letters Patent No. 47,654, dated May 9, 1865.

To all whom it may concern:

Be it known that I, ROBERT McGRATH, of the city of Philadelphia, and county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement for the Expulsion of Fluids from Wells by the Blowing Process, and is especially applicable to forcing oils from oil-wells, thereby superseding the pumping operation; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the following devices, as hereinafter fully explained in the specification and its accompanying drawings, for the purpose of expelling oil and other fluids from wells. The manner of accomplishing that object is as follows: I place an air-condenser (denoted by A A in the accompanying drawings) above the ground and outside of the well-tubing B B. To the condenser is attached a conducting-pipe, C, of small diameter, which passes down the inside

and to one side of the well-tubing B B into the well or to the end of the said well-tubing. To the extreme end of the small tube or conducting-pipe C is attached a circular pipe, D D, of such size as will not obstruct the passage of the oil or other fluid in its ascent through the main pipe or well-tubing B B. The circular pipe D D, corresponding in diameter to the conducting-pipe C C, is perforated with small holes, permitting the escape of a sufficient quantity of condensed air to force the oil or fluid to the surface of the earth.

I do hereby disclaim the controlling use of compressed air or steam for said purposes; but

I do claim the combination of devices, viz:

The reservoir for compressed air and its connecting-pipe, with stop-cock attached, and the ring pierced in form as described at the bottom of the well.

ROBERT McGRATH.

Witnesses:

R. H. McGRATH,
JOHN A. DUFF.