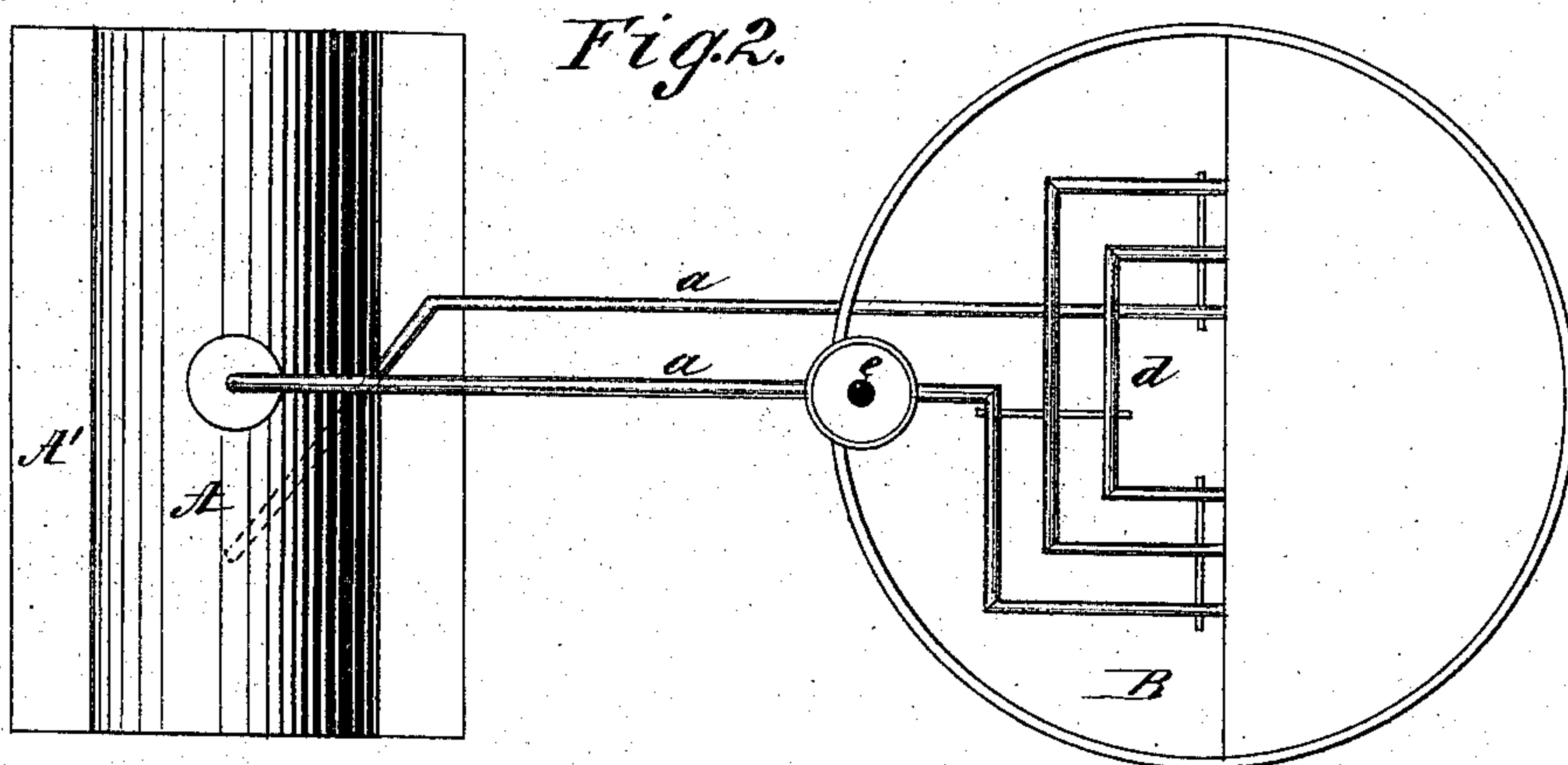
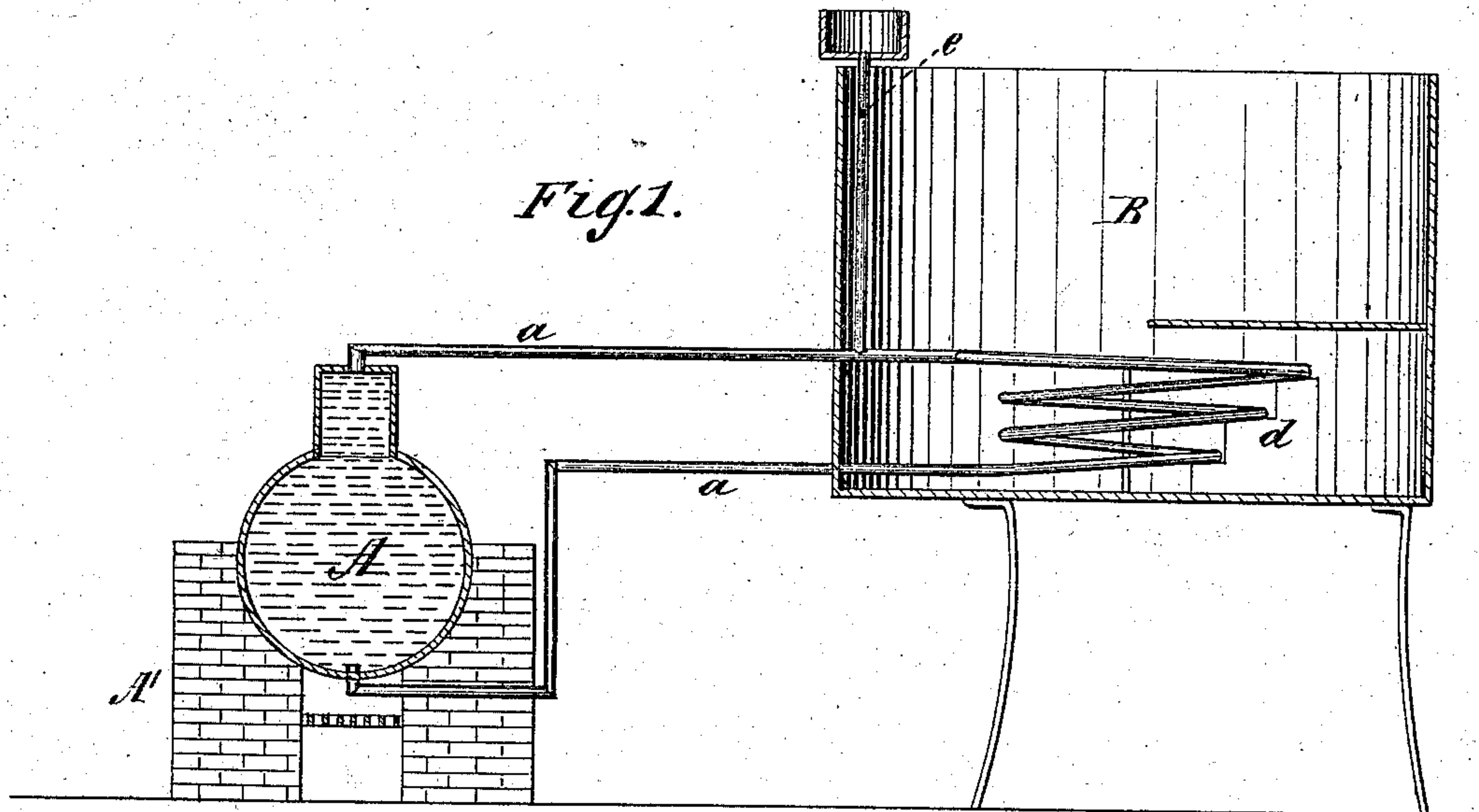


**J. SCHUBERT.**  
**Stills for Refining Oils.**

No. 156,600.

Patented Nov. 3, 1874.



WITNESSES:

*G. Matties*  
*Jolou Kemon*

INVENTOR:

*J. Schubert*  
BY *Kenn & B*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JULIUS SCHUBERT, OF PARKERSBURG, WEST VIRGINIA, ASSIGNOR TO  
WELLS, SCHUBERT & CO.

## IMPROVEMENT IN STILLs FOR REFINING OILS.

Specification forming part of Letters Patent No. **156,600**, dated November 3, 1874; application filed  
August 21, 1874.

*To all whom it may concern:*

Be it known that I, JULIUS SCHUBERT, of Parkersburg, in the county of Wood and State of West Virginia, have invented a new and Improved Apparatus for Purifying Natural Oils; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification.

The invention relates to modes of eliminating impurities from natural oils with hot water; and consists in the apparatus, substantially as hereinafter described and claimed.

Figure 1 is a longitudinal sectional elevation, and Fig. 2 a plan view.

A represents a boiler set over a fire or in a furnace, A', and provided with pipe *a*, connected with the heating-coil *d*, arranged in the close oil-vessel B. *e* is a small vertical pipe connecting with the pipe *d*, for the purpose of carrying off any steam that may be

generated. The boiler A and pipes *a* *d* are filled with water, in which the heat from fire soon generates a current. The warm water now ascends to the coil, and the cooler water passes toward the boiler. The water is thus always below the boiling-point, and yet becomes a vehicle to carry heat from the fire and deliver it to the oil through the pipe-coil *d*. This is continued until the impure substances held in the oil are caused to precipitate themselves to the bottom of vessel B. The period of time required will vary according to the temperature at which the water is kept and the particular character of the oil.

What I claim is—

The described combination with an oil-purifying vessel, B, of the coil *d*, having steam-exit pipe *e*, for the purpose specified.

JULIUS SCHUBERT.

Witnesses:

S. V. WELLS,  
E. H. WELLS.