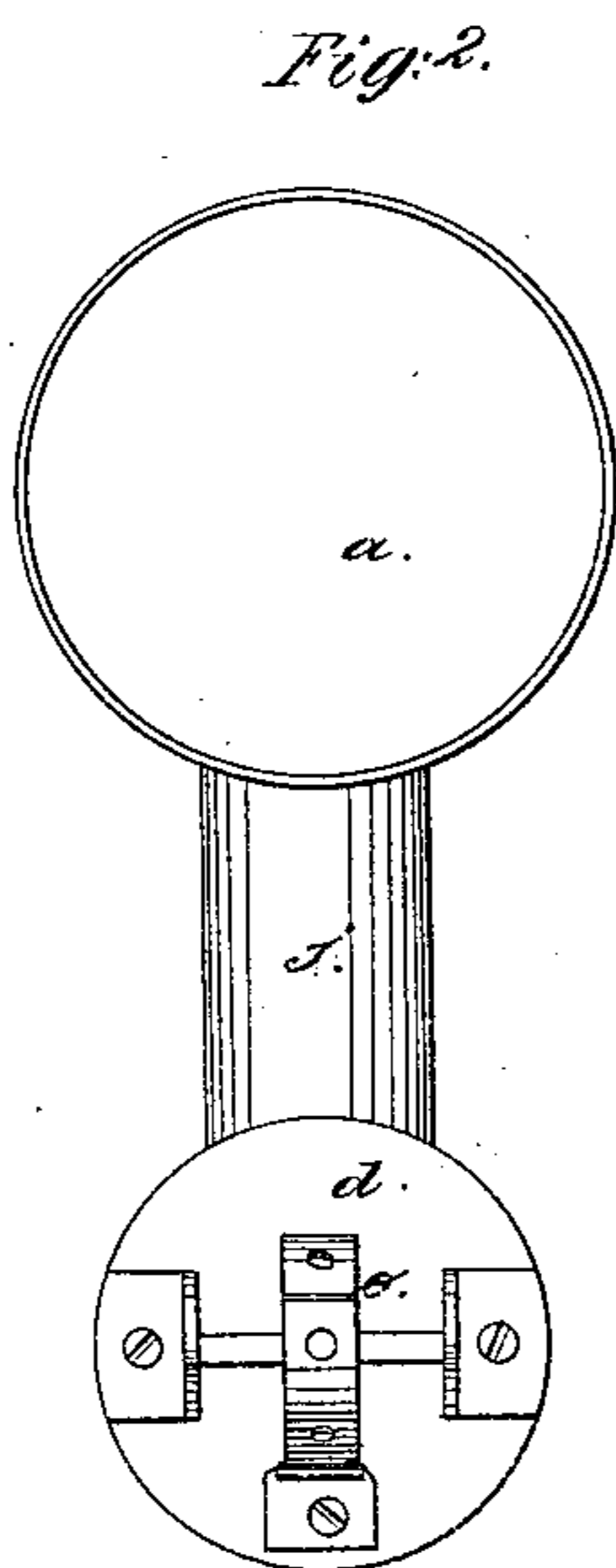
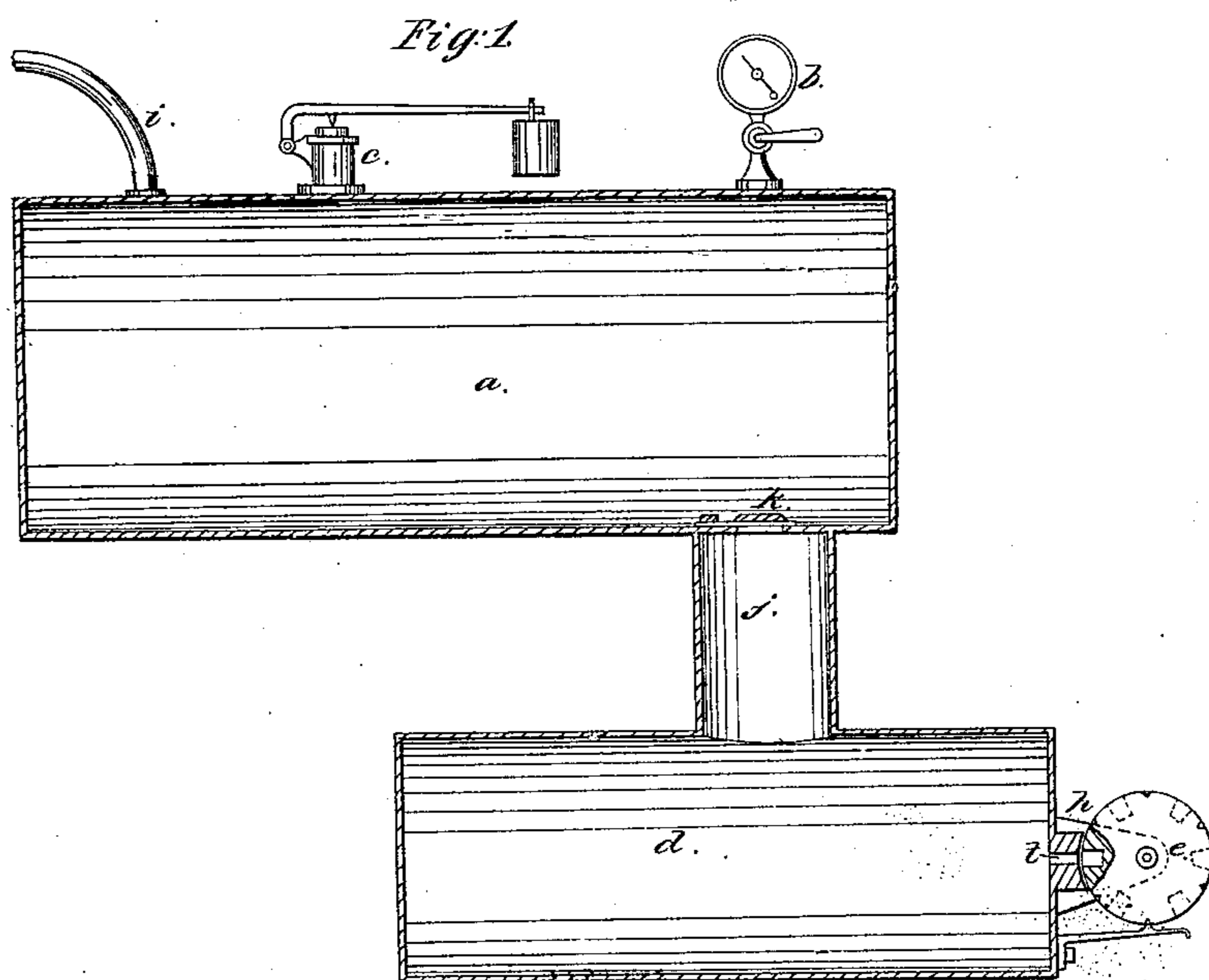


J. Gros, Air Compressor.

N^o 53,758.

Patented Apr. 3, 1866.



Witnesses:

John E. Lynn
Geo. B. Young

Inventor:

Jules Gros
per Murray & Co
Attorneys

UNITED STATES PATENT OFFICE.

JULES GROS, OF PARIS, FRANCE.

IMPROVEMENT IN COMPRESSED-GAS GENERATORS.

Specification forming part of Letters Patent No. 53,758, dated April 3, 1866.

To all whom it may concern:

Be it known that I, JULES GROS, of Paris, in the Empire of France, have invented a new and Improved Generator for Compressed Gas; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use it, reference being had to the accompanying drawings, in which—

Figure 1 represents a longitudinal vertical central section of this invention. Fig. 2 is an end view of the same.

Similar letters of reference indicate like parts.

This invention refers to an apparatus which is intended to produce, by the explosion of fulminating materials—such as fulminate of mercury—compressed gas, which can be used with advantage to impart motion to a suitable engine or other motor.

My apparatus is composed of two vessels, *a* *d*, of sheet metal or other suitable material, and of any desired form or shape, and connected with each other by one or more tubes, *j*. The vessel *a* forms the receiver, and the vessel *d* the generator, and the former is provided with a pressure-gage, *b*, and one or more safety-valves, *c*, of any suitable construction.

The generator *d* is furnished with a revolving cylinder, *e*, which is mounted on a shaft, having its bearings in suitable standards attached to one of the heads of said generator, and this cylinder is provided with a series of chambers to receive the fulminating material; or, instead of chambers it may be provided with nipples to receive percussion-caps or any suitable explo-

sive material. Said revolving cylinder is placed over a curved seat, *h*, which is perforated with a hole, *t*, extending to the interior of the generator, and the explosive material contained in the chambers of the revolving cylinder is so arranged that it can be exploded whenever one of said chambers comes opposite the hole in the curved seat. The mechanism for exploding said material is not shown in the drawings, and I do not wish to confine myself to any particular device for this purpose, but reserve the right to change the same as may be desirable. The gases produced by the successive explosions pass by their own action through the hole *t* into the generator *d*, and thence through the pipe *j* into the reservoir, a suitable check-valve being provided to prevent them from returning into the generator after the same have once passed into the receiver.

By this apparatus gases of a pretty high pressure can be collected in the receiver, and by conducting these gases through a suitable pipe, *i*, to an engine or other motor, a cheap motive power is obtained.

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

The generator *d*, provided with a revolving chambered cylinder or any equivalent device, in combination with the receiver *a*, constructed and operating substantially as and for the purpose described.

JULES GROS.

Witnesses:

E. SHERMAN GOULD,
C. EMOS.