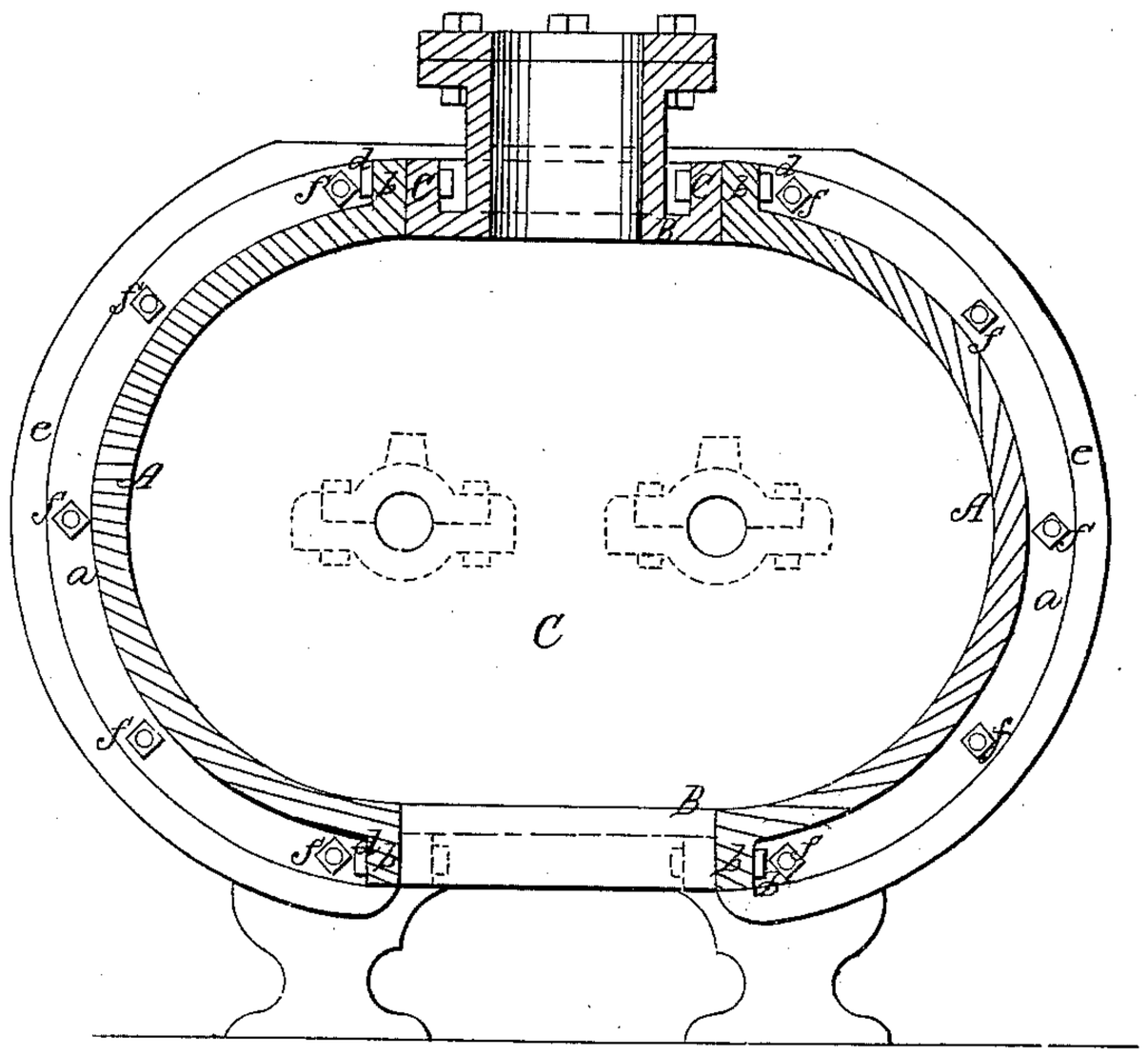
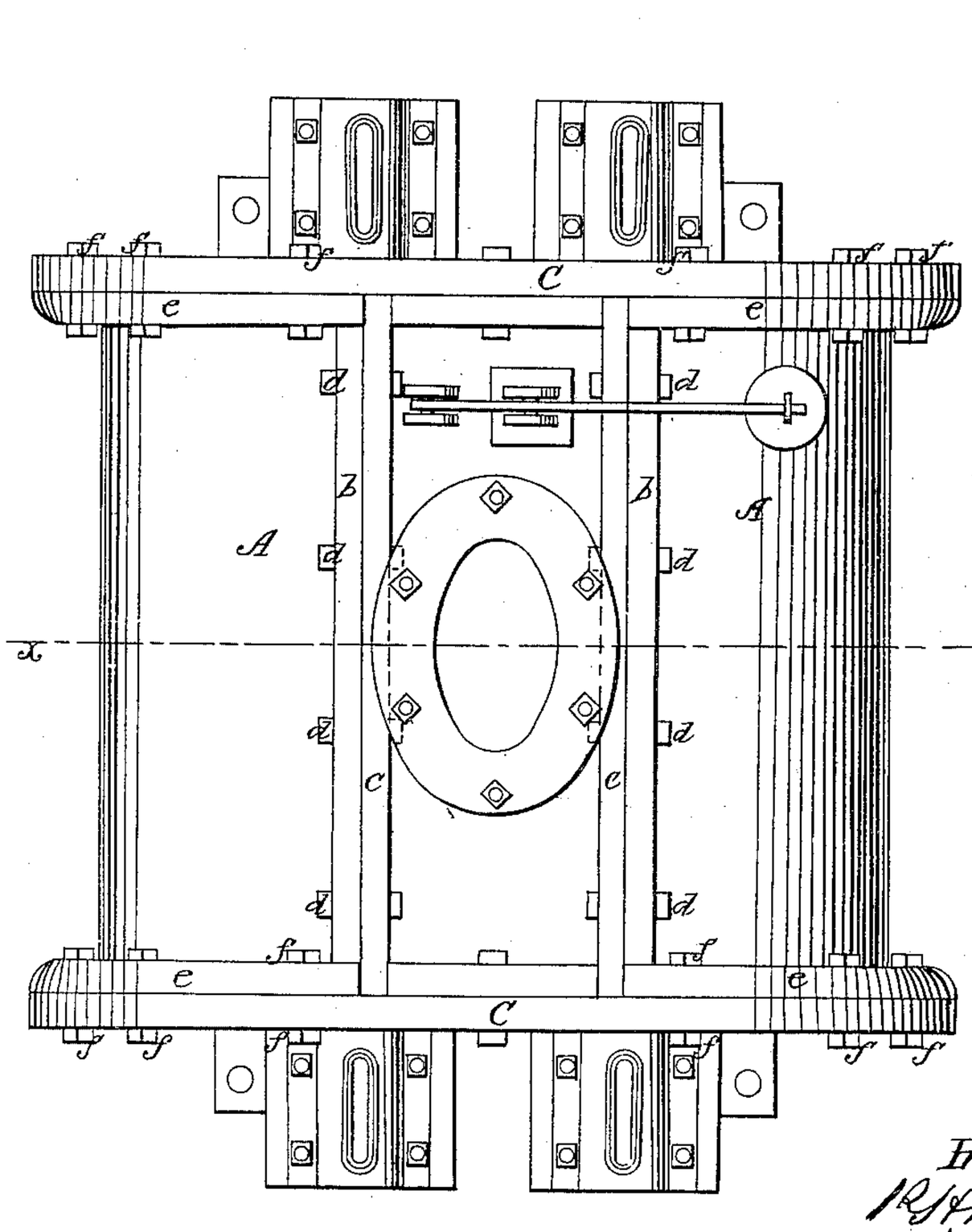
P. H. ROOTS.

BLOWER CASE.

No. 44,892. Patented Nov. 1, 1864.





Witnesses

C. L. Toplift

Henry Morris

Inventor:

P. H. Roots

Per Munn & Co

Attorneys

UNITED STATES PATENT OFFICE.

P. H. ROOTS, OF CONNERSVILLE, INDIANA.

IMPROVEMENT IN BLOWER-CASES.

Specification forming part of Letters Patent No. **44,892**, dated November 1, 1864.

To all whom it may concern:

Be it known that I, P. H. ROOTS, of Connersville, in the county of Fayette and State of Indiana, have invented a new and Improved Case for Blowers; 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 the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a transverse vertical section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a plan or top view of the same.

Similar letters of reference indicate like parts.

This invention relates to a new and improved manner of constructing a case for a blower, which was patented by me September 25, 1860. This case is of oval or elliptical form in its transverse section, and originally was made of sheet or boiler iron bent in the desired form, which is a very imperfect mode of construction.

The object of the present invention is to construct the case of cast-iron, and in such a manner that it may be bored out true, and provided with faced or planed flanges at its ends to receive the end plates, and the whole form a neat and perfect case at a moderate cost of construction.

I construct the case of two semi-cylindrical shells, A A, of equal dimensions, and of cast-iron, each shell being cast separately and with a flange, *a*, at each end, and a longitudinal flange, *b*, at their top and bottom. These parts or shells A A are bolted and secured together and bored out true in a lathe at their inner concave sides, and the outer surfaces of the flanges *a b* are faced or planed perfectly true. The two shells or parts A A are connected together at the proper or desired distances apart by means of plates B B, which are provided with flanges *c* at each side, the outer surfaces of said flanges being faced or planed perfectly true, so that they may abut tightly or snugly against the flanges *b*, to which they are secured by bolts *d*.

C C represent the end plates of the case, which are of cast-iron, and have each a semi-circular bead, *e*, at each side, within which the flanges *a* of the shells A A fit and are secured by bolts *f*. The edges of the flanges *a* are turned, as well as the inner surfaces of the beads *e*, and hence the end plates may be accurately fitted to the shells or parts A A, as will be understood by referring to Fig. 1.

At the center of each semicircular part of the end plates, C C, are the bearings to receive the two shafts of the blower, and the distance between these shafts determines the width of the plates B B, by which the two shells A A are separated the required distance apart, while the beads *e* on the end plates, C C, and the flanges *a* on the ends of the semi-cylindrical shells A A, insure the concentric position of the latter with the shafts of the blower.

Thus by this simple arrangement I obtain a cast-iron case which may be bored out true and fitted snugly and truly together in a durable manner.

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

A case for blowers, composed of two semi-cylindrical shells, A A, connected at the desired distance apart by plates B B.

P. H. ROOTS.

Witnesses:

B. F. DREW,

SAMUEL ENYART.