

R. Blair,
Rotary Steam Engine.
N^o 26,009. Patented Nov. 8, 1859.

Fig: 1.

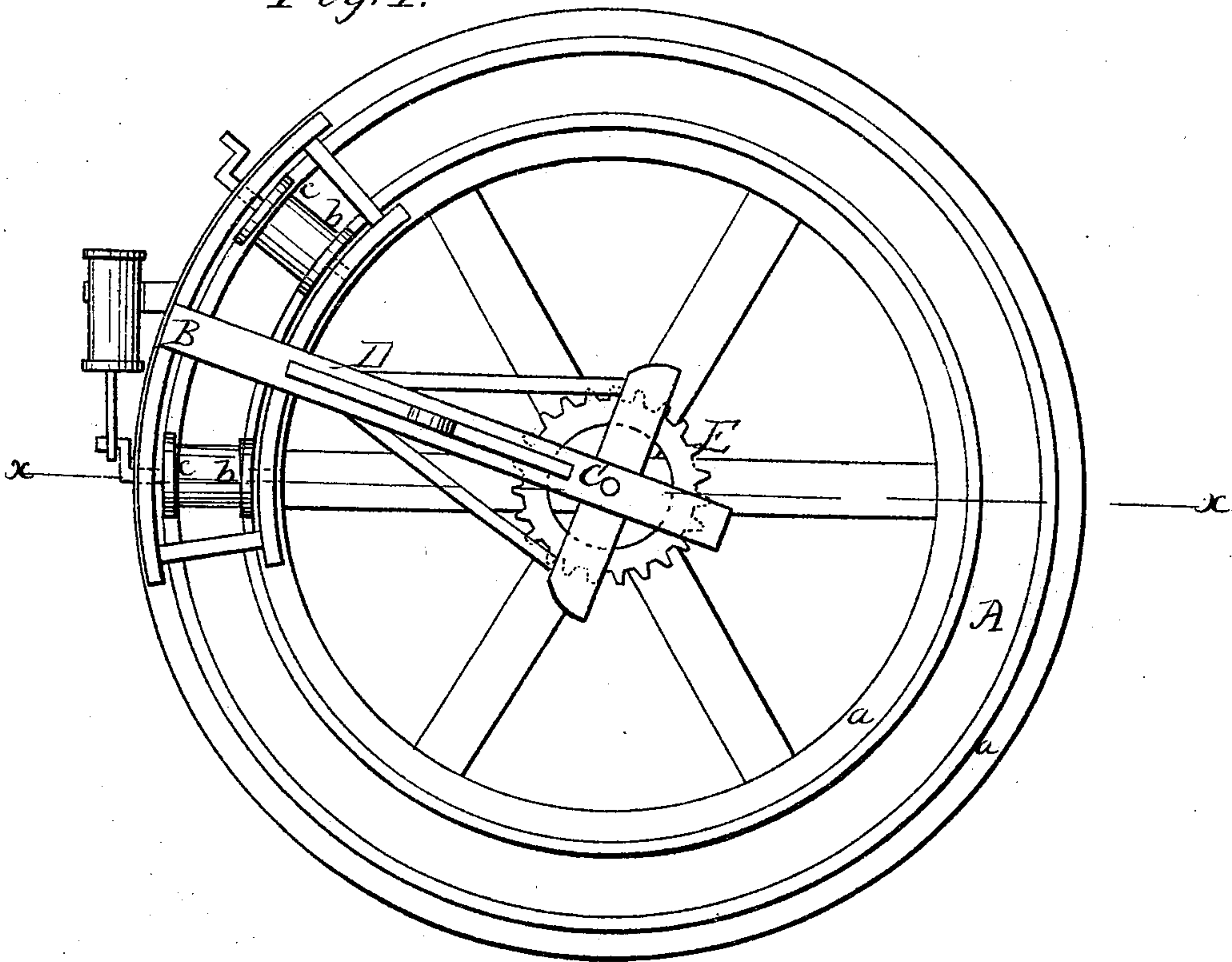
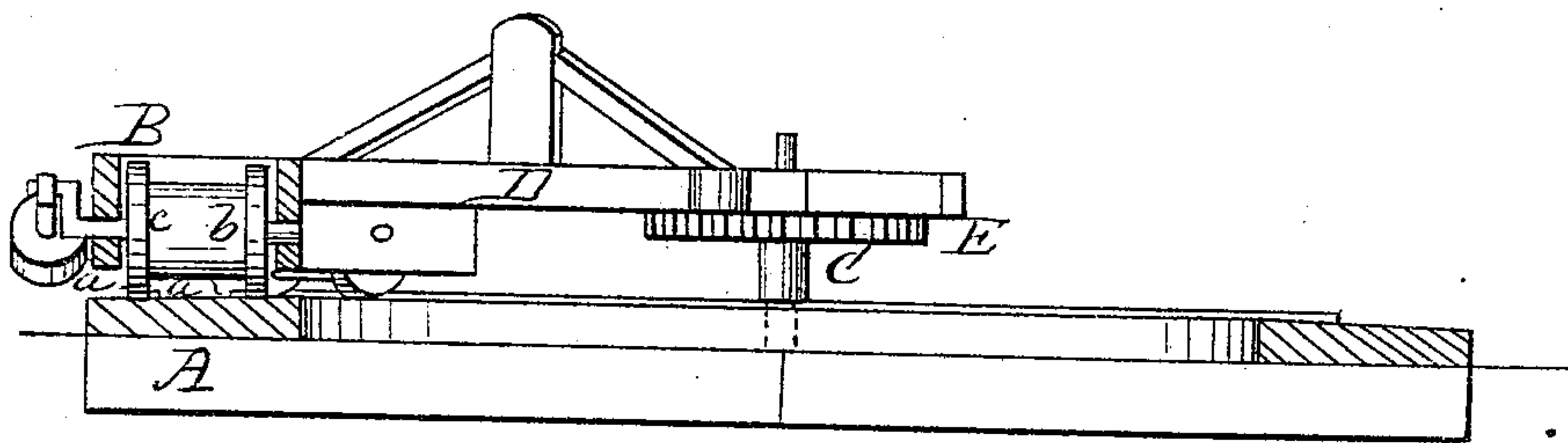


Fig: 2.



Witnesses.

Wm Morgan
Betsy Elsworth

Inventor.
Robert Blair

UNITED STATES PATENT OFFICE.

ROBERT BLAIR, OF MALUGIN GROVE, ILLINOIS:

DEVICE FOR APPLYING STEAM AS A MOTOR.

Specification of Letters Patent No. 26,009, dated November 8, 1859.

To all whom it may concern:

Be it known that I, ROBERT BLAIR, of Malugin Grove, in the county of Lee and State of Illinois, have invented a new and
5 Improved Device for Applying Steam as a Motor, designed chiefly for driving portable machinery; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had
10 to the annexed drawings, making a part of this specification, in which—

Figure 1, is a plan or top view of my invention. Fig. 2, a vertical section of do, taken in the line *x, x*, Fig. 1.

15 Similar letters of reference indicate corresponding parts in the two figures.

The object of this invention is to supersede the various horse powers that are now used for driving portable machinery, chiefly
20 such as is used by agriculturists, as threshing machines, for instance, churns, pumps, and the like.

The invention consists in placing a traction steam engine on an annular way and
25 having said engine attached to a radius frame, the center shaft of which is provided with a toothed wheel or pulley from which the power is taken as the engine passes around the annular way.

30 To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents an annular way which may be provided with rails *a, a*, and on which a
35 traction steam engine B, is placed. This engine may be constructed in any proper manner, nothing new or novel being required to adapt it to this way, with the exception that the innermost wheels *b*, require to be
40 somewhat smaller in diameter than the outer ones *c* and the axles of the same radiate from a center in order that the wheels may conform to or travel in the paths of circle described by the rails. The way A, may be
45 constructed in any proper manner, and at its center there is a vertical shaft C, to the upper part of which a radius frame D, is attached, the outer end of said frame being connected to the engine B. The shaft C, may be supported in proper position in any suitable
50 way, and a toothed wheel E, is placed on

said shaft. The wheel E, may be connected by any suitable arrangement of gearing with a shaft from which the power is to be taken, said gearing being of course arranged ac- 55
cording to the speed required to be communicated to the machinery to be driven. The way A, may be of larger or smaller diameter according to the power required. It will of course be seen that the larger the
60 frame D, the greater will be the power that may be taken from the wheel E.

From the above description it will be seen that considerable power may be obtained from a small engine, owing to the arrange- 65
ment of the lever or frame D, for transmitting the power from the engine to the machinery to be driven. A stationary engine could not be well arranged for driving portable machinery. It could not be trans- 70
ported from place to place and the necessary gearing attached to it with facility, neither could the arrangement for transmitting the power be so simply arranged as by the improvement herein described. By this 75
improvement a smaller engine may be used than could be made available if stationary, and besides the whole device may be readily transported from place to place, and put in operation at once by merely placing the 80
way A, in a horizontal position.

I do not claim applying the power at the outer end of a long lever, as this is old. Nor do I claim transmitting motion by such a device, but 85

What I do claim as my invention and desire to secure by Letters Patent, is—

The combination with a radial lever or frame D, and circular railway A, and central revolving power transmitting shaft C,— 90
of a traction steam engine B, when the crank axes of said engine radiate from the central shaft C, and the inner traction wheels are made of smaller diameter than the outer ones, the whole arranged and operated sub- 95
stantially in the manner and for the purpose set forth.

ROBERT BLAIR.

Witnesses:

WM. MORGAN,
BETSEY ELSWORTH.