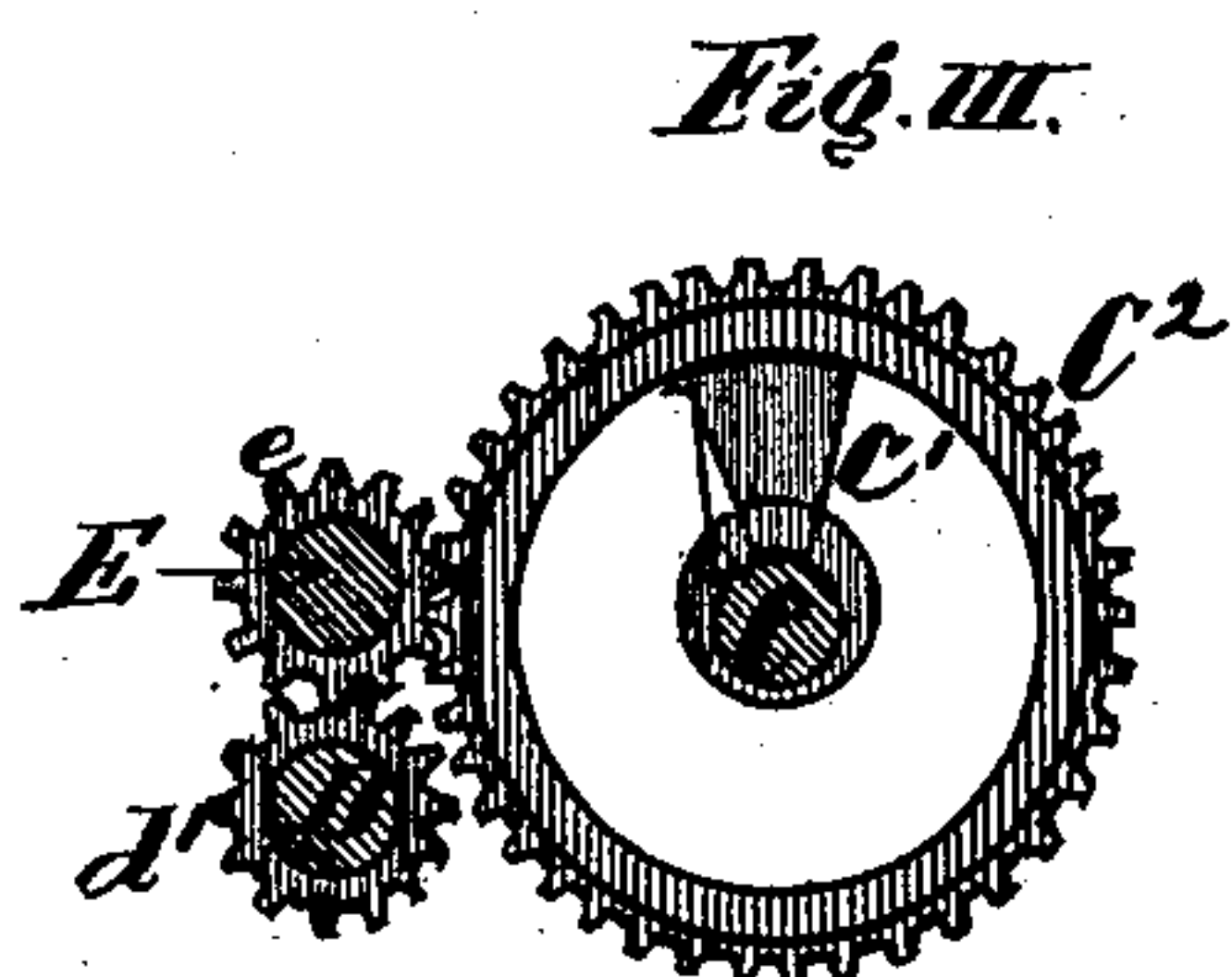
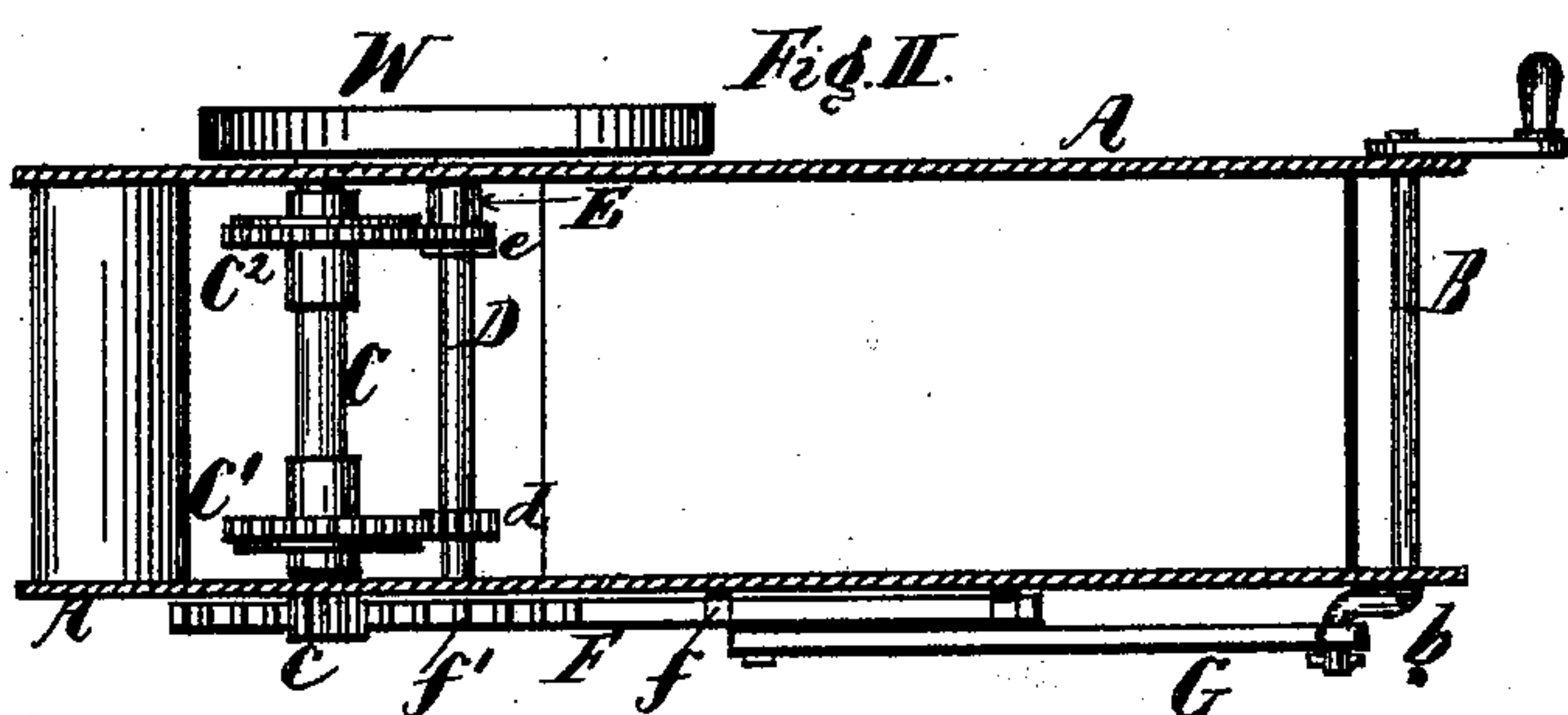
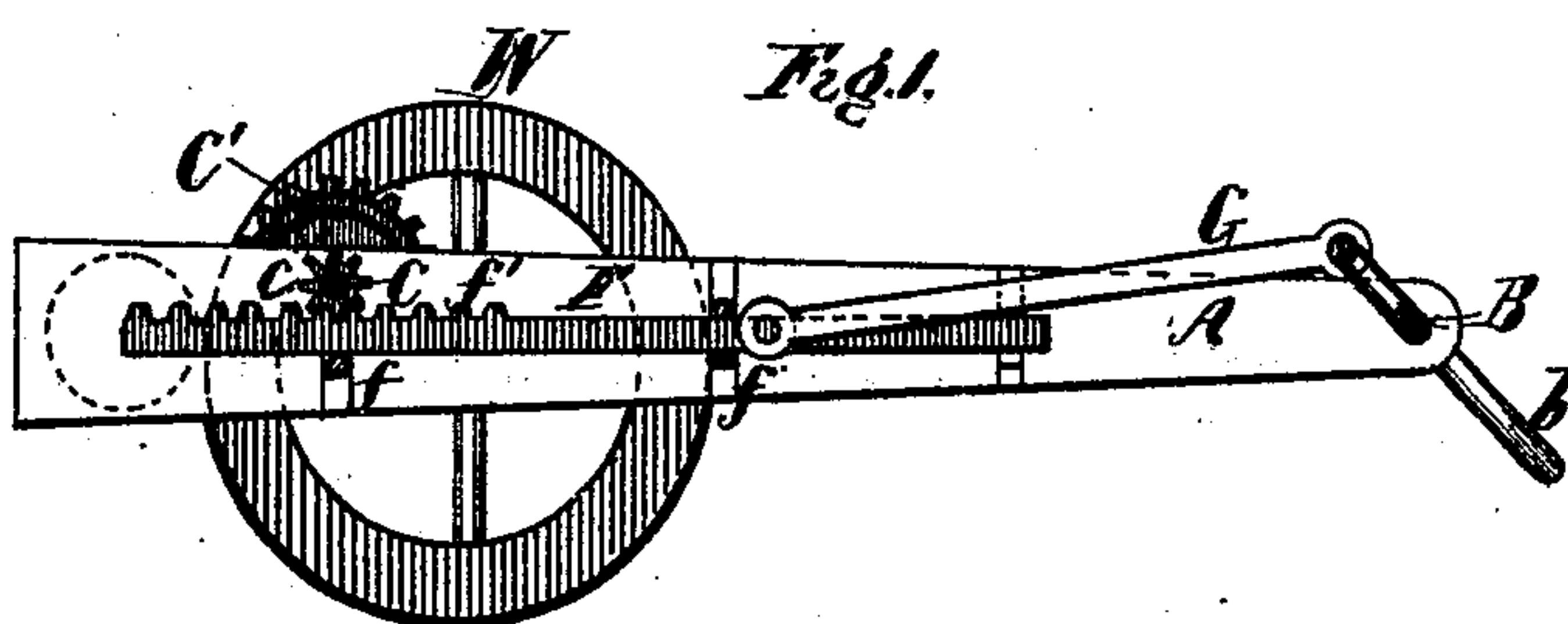


E. MEREDITH.
 Converting Reciprocating into Rotary Motion.
 No. 200,556. Patented Feb. 19, 1878.



Witnesses:

J. B. Riff
Richard G. Smith

Inventor:

Edwin Meredith

Per: *Henry G. Smith*
Atty.

UNITED STATES PATENT OFFICE.

EDWIN MEREDITH, OF BATAVIA, ILLINOIS.

IMPROVEMENT IN CONVERTING RECIPROCATING INTO ROTARY MOTION.

Specification forming part of Letters Patent No. **200,556**, dated February 19, 1878; application filed January 16, 1878.

To all whom it may concern:

Be it known that I, EDWIN MEREDITH, of Batavia, in the county of Kane, in the State of Illinois, have invented a new and useful Improvement in a Device for Converting Reciprocating into Rotary Motion; and I hereby declare the following to be a full and clear description of the same.

The nature of the invention will be clearly understood by reference to the accompanying drawings and the subjoined description.

Figure 1 represents a side elevation of the machine. Fig. 2 is a plan of the same. Fig. 3 is a sectional elevation of the machine, showing one of the friction-clutches and the intermediate pinion between the driving-wheel and the fly-wheel shaft.

The frame A provides the necessary bearings for the rock-shaft B, the driving-shaft C, the fly-wheel shaft D, and the counter-shaft E. A sliding bar, F, has its bearings *f* attached to one side of the frame A, and this bar may receive a direct reciprocating motion from the piston-rod of an engine, or from the pitman G, attached to the crank *b* of the rock-shaft B, or from any other machinery whatever which will communicate a reciprocating motion.

A cog-rack, *f'*, on one side of the rod F, gears into and actuates a cogged pinion, *e*, which is placed upon and attached to the driving-shaft C. Two loose driving-wheels, C¹ and C², are placed upon the shaft C, the said

shaft having only a rocking motion as the rack *f'* is moved back and forth. Two spring-pawls, *c'*, are attached to the shaft C, and arranged to act against the projecting annular flanges of the wheels C¹ and C², either by friction or by serrated teeth, so as to move the said wheels first by one and then by the other, as the shaft C is turned first in one direction and then in the other, as has been explained. This arrangement permits one of the said pawls to be constantly acting, except in the infinitely small space of time that is occupied in reversing the motion of the bar F.

The wheel C¹ gears into the pinion *d* on the fly-wheel shaft D, and the wheel C² gears into an intermediate pinion, *e*, on the shaft E, the pinion *e* gearing into the pinion *d'*, also on the fly-wheel shaft. The effect of this arrangement is to communicate to the shaft D a continuous rotary motion, while the fly-wheel W upon this shaft will serve to carry it past all the dead-points incident to reversing the bar F.

Having described my invention, I claim—

The two wheels C¹ and C², actuated by the shaft C and its spring-pawl *c'*, and the cogged pinions *d* and *e d'*, combined and arranged as and for the purpose set forth.

EDWIN MEREDITH.

Witnesses:

EMANUEL HOLBROOK,
CLINTON E. MEAD.