

No. 704,647.

Patented July 15, 1902.

J. H. KNIGHT.

MACHINE FOR LAYING BRICKS FOR BUILDING PURPOSES.

(Application filed June 17, 1901.)

(No Model.)

FIG. 1.

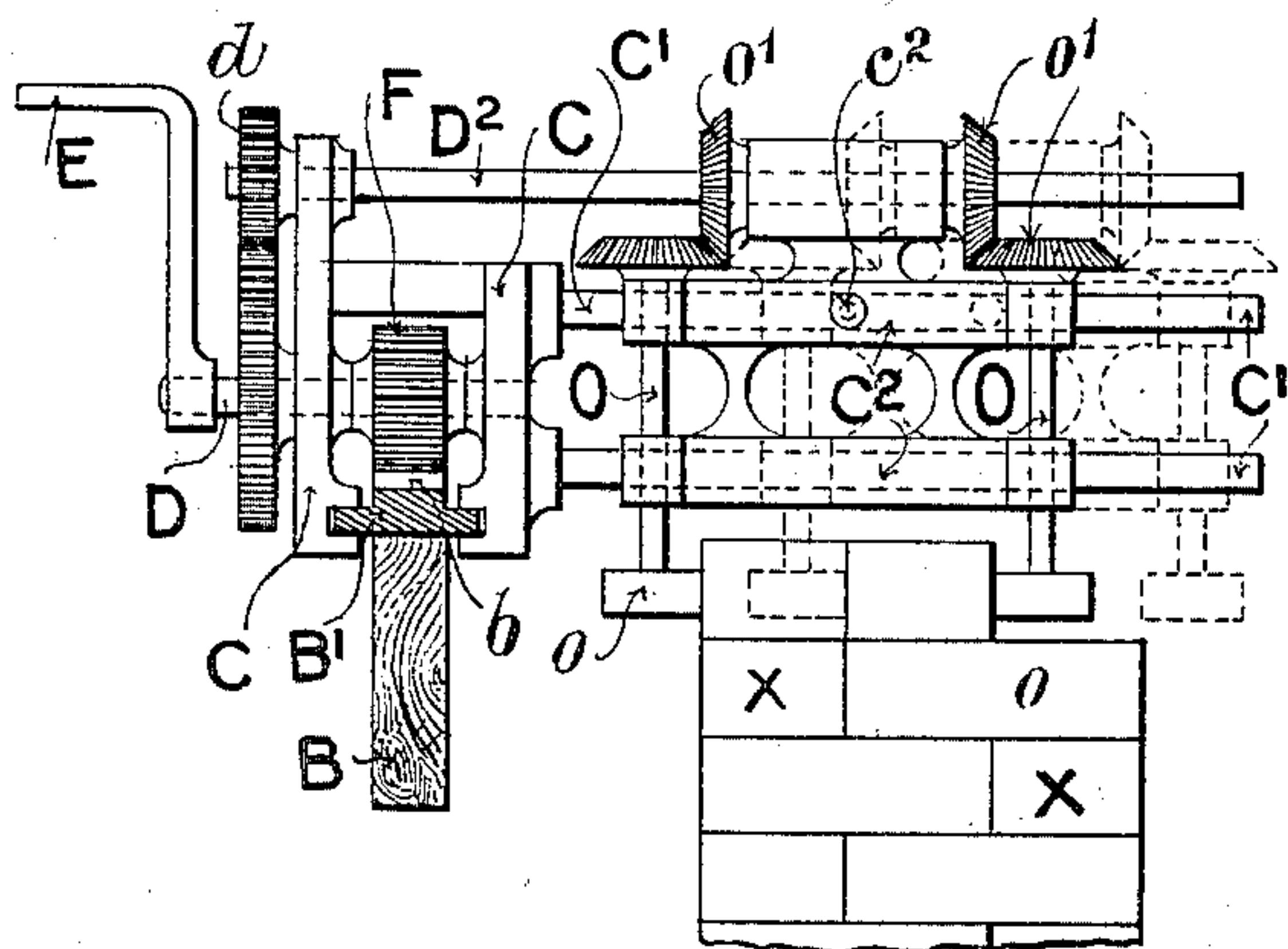
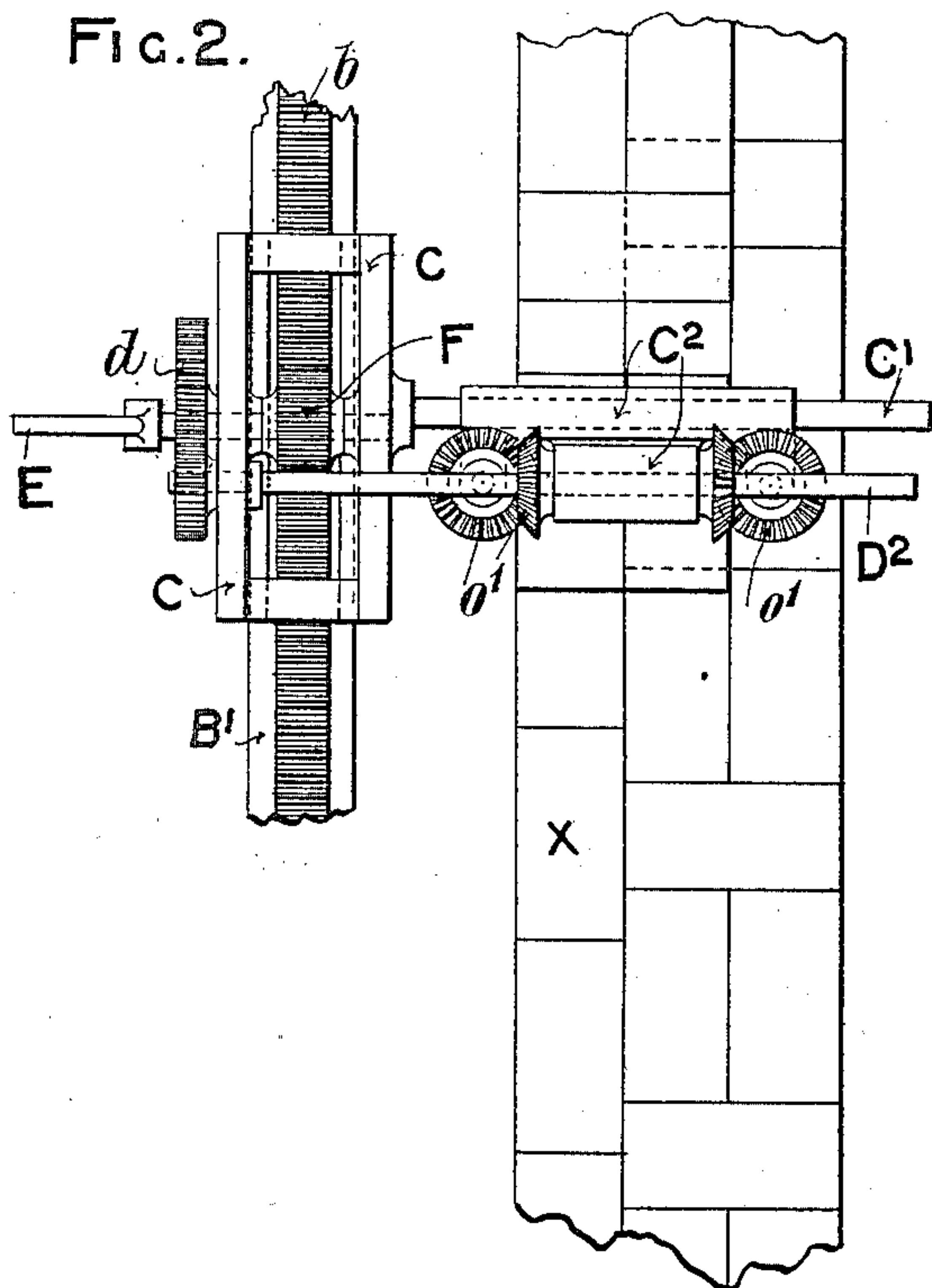


FIG. 2.



WITNESSES:

*A. Knight Broad*

*James A. Davies.*

INVENTOR.

*John Henry Knight.*

Per

*Robert E. Phillips.*

*his Attorney.*

# UNITED STATES PATENT OFFICE.

JOHN HENRY KNIGHT, OF BARFIELD, NEAR FARNHAM, ENGLAND.

MACHINE FOR LAYING BRICKS FOR BUILDING PURPOSES.

SPECIFICATION forming part of Letters Patent No. 704,647, dated July 15, 1902.

Application filed June 17, 1901. Serial No. 64,946. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN HENRY KNIGHT, a subject of the King of Great Britain, residing at Barfield, near Farnham, in the county of Surrey, England, have invented a new and useful Improvement in Machines for Laying Bricks for Building Purposes, (for which I have applied for Letters Patent in Great Britain, numbered 23,084 and bearing date the 18th day of December, 1900,) of which the following is a full and complete specification.

This invention relates to an improvement in the apparatus for laying bricks for building purposes for which Letters Patent No. 669,220, bearing date the 5th day of March, 1901, were granted to me; and it has for its object enabling walls of any thickness to be built by the said apparatus.

According to the present invention the vertical rollers adapted to feed and lay the bricks are so mounted that their transverse position with respect to the traversing frame can be adjusted according to the width or thickness of wall to be built.

In the accompanying drawings, which illustrate the apparatus arranged to build a wall a brick and a half thick, Figure 1 is a view in end elevation, partly in section. Fig. 2 is a broken view in plan.

Throughout the views similar parts are marked with like letters of reference.

The frame C is mounted on a plate B' on the guide-beam B, so as to be free to travel thereon, and has motion imparted to it by means of the axle D, carrying a pinion F, gearing with the rack b on the plate B' and operated by a cranked handle E, as specified in my prior patent, No. 669,220. The frame C is provided with fixed arms or bars C', on which is mounted a secondary frame C<sup>2</sup>, adapted to slide thereon transversely to the beam B. The spindles O, carrying the feeding-rollers o, are mounted in bearings in the frame C<sup>2</sup> and have rotary motion imparted to them from the axle D by means of an intermediate axle D<sup>2</sup>, spur-gearing d, and bevel or miter gearing o'. The axle D<sup>2</sup> is provided with a key or feather which engages a keyway or feather-way in each of the bevel or miter wheels mounted thereon in order to allow of the transverse movement of the frame C<sup>2</sup> with respect to the axle D<sup>2</sup>. The frame C<sup>2</sup> is

fixed in the desired position on the arms or bars C' by means of a pin or set-screw c<sup>2</sup> or by any other suitable locking or clamping device.

In building a wall a brick and a half thick the apparatus first lays a course of bricks in the usual bond along one side of the wall, and subsequently a course of stretchers X to make up the total width or thickness is laid either by hand or by the apparatus. For the next course the framework C<sup>2</sup> is shifted laterally the four and one-half inches necessary, assuming English bricks to be used, to bring the rollers into the position necessary to lay the next course in the usual bond, as shown by dotted lines in Fig. 1, so that the course of stretchers X come on the opposite side of the wall to those in the last course.

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

1. A machine for laying bricks consisting of an adjustable guide-beam arranged parallel with and in close proximity to the position of the wall to be built, of a frame mounted on the said guide, of means to cause it to positively traverse the same including an axle carried by the frame and rotated by a handle, and of brick-feeding rollers carried by a frame capable of independent transverse movement with respect to the traversing frame, as set forth.

2. A machine for laying bricks consisting of an adjustable guide-beam arranged parallel with and in close proximity to the position of wall to be built, of a frame mounted on the said guide, of means to cause it to positively traverse the same including an axle carried by the frame and rotated by a handle, of a secondary frame capable of independent transverse movement with respect to the traversing frame, and of feeding-rollers arranged in pairs carried by the frame and operated from the axle through gearing, as set forth.

3. In a machine for laying bricks the combination with a frame traversing an adjustable guide-beam arranged parallel with and in close proximity to the position of the wall to be built of brick-feeding rollers o carried by a frame capable of independent transverse movement with respect to the traversing frame, as and for the purpose set forth.

4. In a machine for laying bricks, the com-



5 combination with a frame traversing a guide-beam parallel with and in close proximity to the position of the wall to be built, of brick-feeding rollers arranged in pairs on each side of the wall, of a secondary frame carrying the said rollers mounted on the main frame so that its transverse position may be varied, as and for the purpose set forth.

10 5. In a machine for laying bricks the combination of a guide-beam B, arranged parallel with and in close proximity to the position of the wall to be built of a frame C mounted to slide thereon, of means to cause the frame to

positively traverse the guide B, of a secondary frame C<sup>2</sup> mounted so as to be transversely adjustable on the frame C, and of brick-feeding rollers *o* carried by the frame and operated from the axle through gearing, as set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JOHN HENRY KNIGHT.

Witnesses:

ROBERT F. PHILLIPS,  
A. KNIGHT CROAD.