

(No Model.)

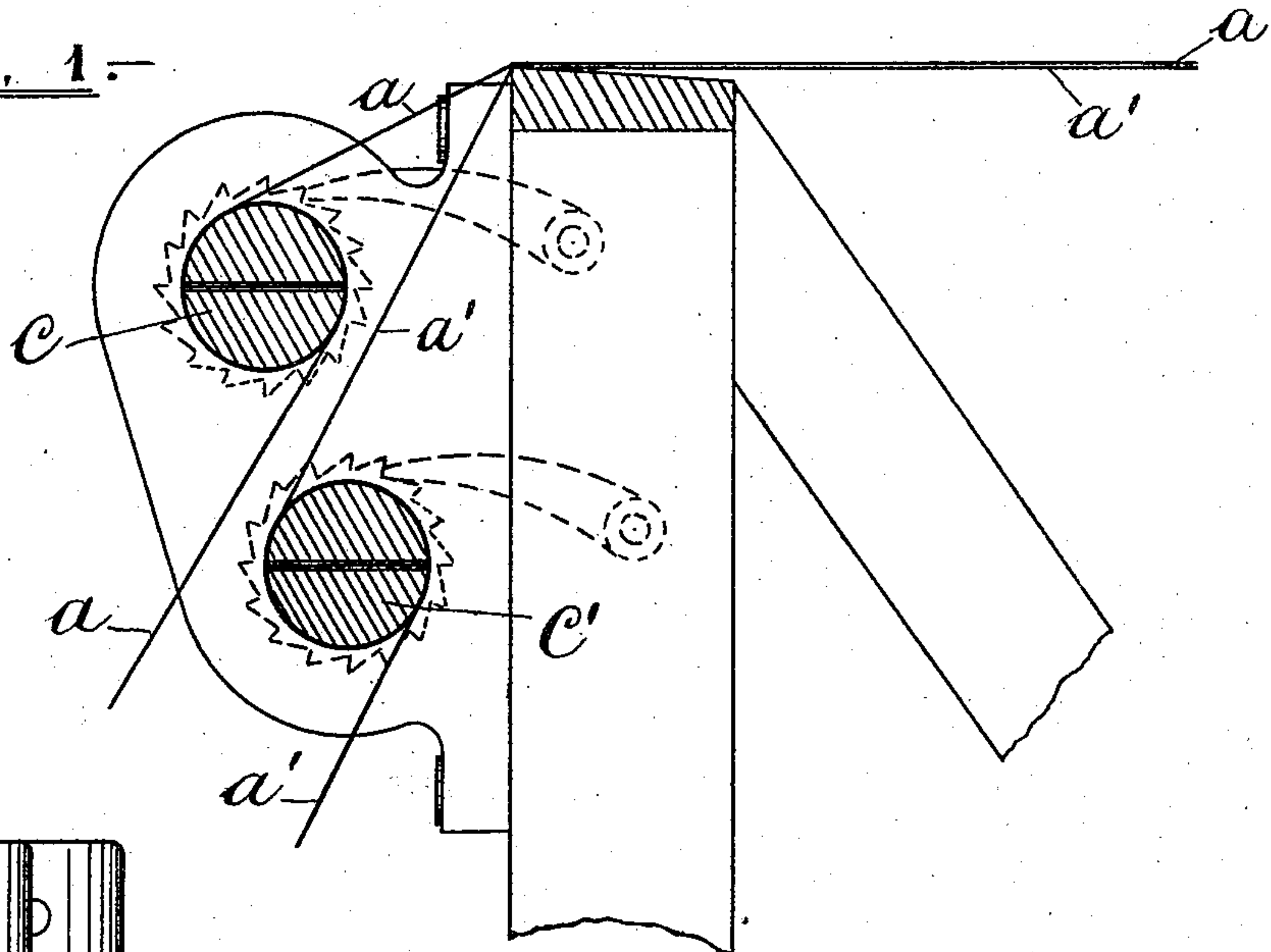
G. ROGER.

APPARATUS FOR CUTTING THE PILE OF WEFT PILE FABRICS.

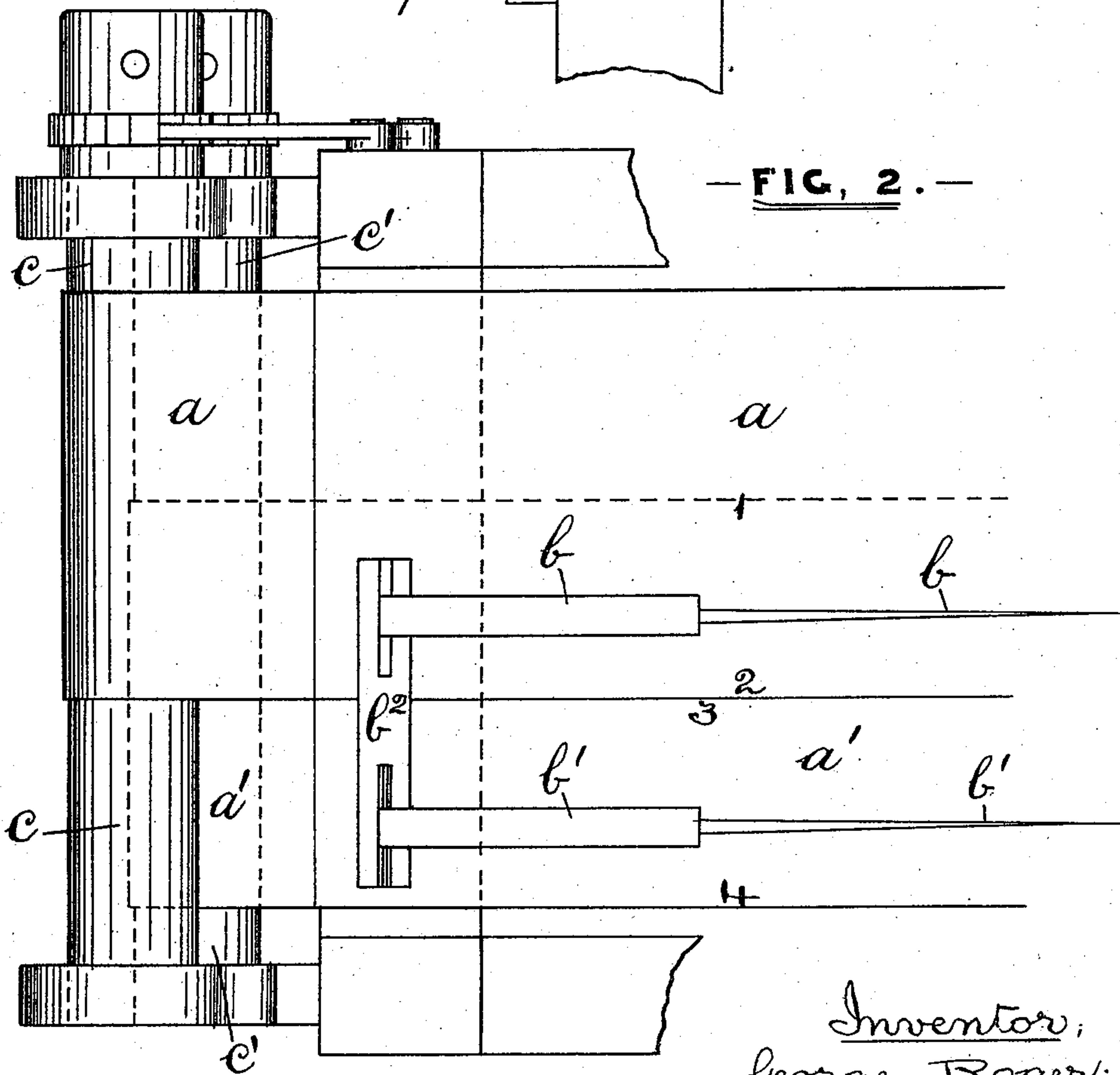
No. 504,441.

Patented Sept. 5, 1893.

—FIG. 1.—



—FIG. 2.—



Witnesses:
George Frederick Gadd.
Arthur Gadd.

Inventor,
George Roger.
Per: William Gadd.
Attorney.

UNITED STATES PATENT OFFICE.

GEORGE ROGER, OF WARRINGTON, ENGLAND.

APPARATUS FOR CUTTING THE PILE OF WEFT-PILE FABRICS.

SPECIFICATION forming part of Letters Patent No. 504,441, dated September 5, 1893.

Application filed November 22, 1892. Serial No. 452,789. (No model.) Patented in England March 15, 1892, No. 5,065; in France November 19, 1892, No. 225,780, and in Germany November 22, 1892, No. 68,288.

To all whom it may concern:

Be it known that I, GEORGE ROGER, a subject of the Queen of Great Britain, residing at 27 Marsh House Lane, Warrington, in the county of Lancaster, England, have invented new and useful Improvements in Apparatus for Cutting the Pile of Weft-Pile Fabrics, (for which I have obtained Letters Patent in the following countries: Great Britain, No. 5,065, bearing date March 15, 1892; France, No. 225,780, bearing date November 19, 1892, and Germany, No. 68,288, bearing date November 22, 1892,) of which the following is a specification.

The improvements relate to cutting the pile of weft pile fabrics such as velvets and velveteens, wherein each race is required to be cut in direct succession across the piece by manual labor, and have for their object to enable the operator to employ more than one knife at once, for such purpose, and thereby to increase the amount of work done in a given time. To accomplish this, and to effect my improvements, I arrange the frame, or supports, upon which the fabric is stretched, and which is, by preference, what is known as a long run frame, with two or more rollers at each end or support, or other means for stretching two or more pieces of fabric at once, one over the other, but in such wise, that a portion, in width, of the lower fabric is left uncovered by the next upper fabric stretched just above it. In the case of two of such pieces being thus stretched to overlap each other, a cutting knife may be set into a race in each of them, and, the two knives, being in sufficiently close proximity for the purpose, may be pushed forward by the operator, as he advances from the setting in end to the opposite end of the cutting frame; thereby he may cut two races during the same distance of travel wherein he at present accomplishes the cutting of one. When the number of races are cut in the lower fabric, which are at first exposed, the upper cloth can be drawn back, in the width, for a similar distance to that at first obtained and the further cutting continued until the whole width of the fabric is cut. In like manner, more

than two fabrics may be thus operated upon, to such extent as the skill of the operator, and the convenience of the arrangement will admit.

Variations may be made in the mode of, or apparatus for stretching the fabric, and the knives may or may not be bound together, and other variations in detail may be made without departing from the peculiar character of the invention. But that the improvements may be better understood, I will, with the aid of the accompanying drawings in which Figure 1 represents a section and Fig. 2 a plan view of my improved apparatus, proceed more fully to describe the means employed by me.

In the drawings, *a. a'* are the two lengths of fabric to be cut, one piece, as fully shown in Fig. 2. being partly covered by the other.

b. b' are the cutting knives, operated, by preference, at such a distance apart, that corresponding, or approximately corresponding races in each piece of fabric are cut simultaneously.

b² is a cross-piece or support, to enable the operator to more easily manipulate the two knives, but this may be dispensed with, or other means substituted, for the same purpose.

c. c' are the rollers, or beams, for tightening the cloth, at each cutting length, such rollers being enabled to sustain tension thereon by ratchet and pawl, as shown, or by any other means. When the half-surface 1. 2. of the upper piece of cloth, and the corresponding half-surface 3. 4. of the under piece have been cut, it is convenient that the lengths of fabric are moved until their lateral positions are interchanged, when the uncut portion of the lower length will be exposed, and the cutting operation may be resumed, until the whole width is completely cut, the beams afterward being released, and a fresh length of fabric drawn forward, and stretched, as will be well understood.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

In apparatus for cutting the pile of weft
pile fabrics such as velvets and velveteens
the combination of a frame, cloth straining
beams or rollers *c. c'* mounted in one end
5 thereof, the one below and slightly in advance
of the other, and means for holding the roll-
ers or beams in position when under tension,

whereby two pieces of velvet or velveteen can
be cut at one operation, substantially as de-
scribed.

GEORGE ROGER.

Witnesses:

WILLIAM GADD, *C.E.*,
GEORGE FREDERICK GADD.