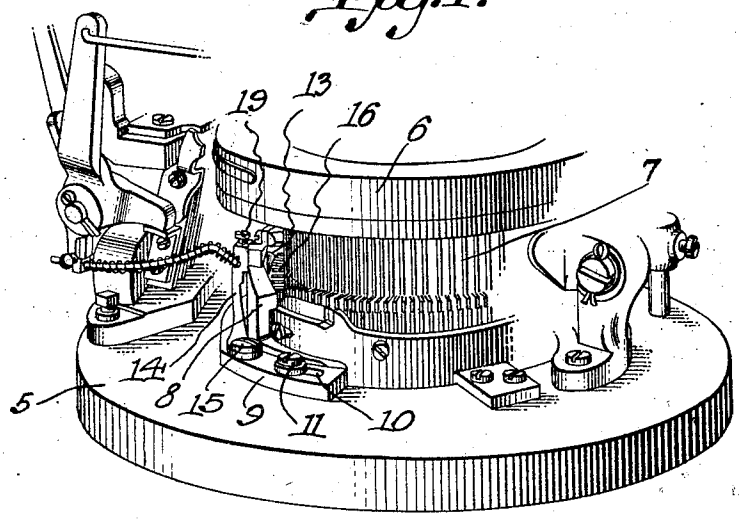
March 30, 1926. 1,579,091

W. L. DENSON ET AL

ADJUSTABLE DIVIDING CAM

Filed June 6, 1924

Fig. 1.



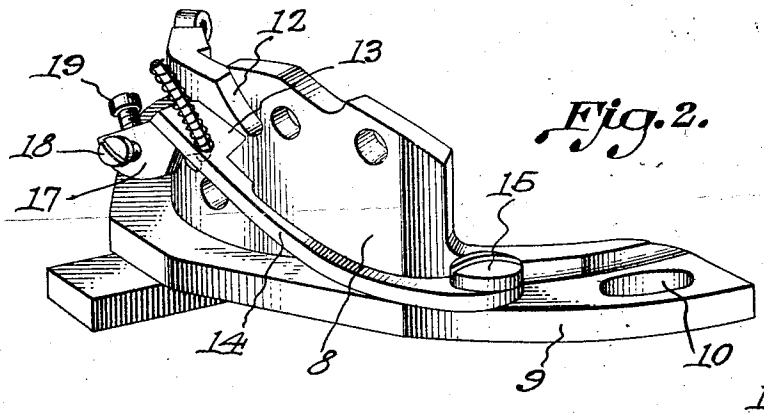


Fig. 2.

Fig. 4.

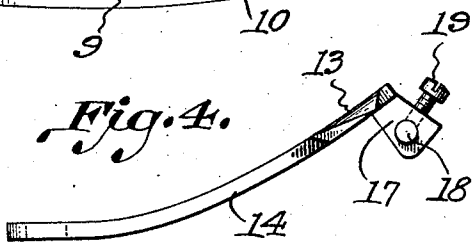
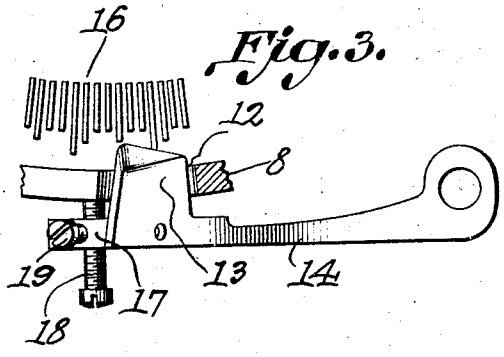


Fig. 3.



Inventors

W. L. Denson and

G. E. Brumitt

By C. A. Snow & Co.

Attorneys.

Patented Mar. 30, 1926. 1,579,091

UNITED STATES PATENT OFFICE.

WALTER L. DENSON AND GEORGE E. BRUMITT, OF SPARTANBURG, SOUTH CAROLINA.

ADJUSTABLE DIVIDING CAM.

Application filed June 6, 1924. Serial No. 718,304.

To all whom it may concern:

Be it known that we, WALTER L. DENSON and GEORGE E. BRUMITT, citizens of the United States, residing at Spartanburg, in the county of Spartanburg and State of South Carolina, have invented a new and useful Adjustable Dividing Cam, of which the following is a specification.

This invention relates to knitting machines and aims to provide novel means whereby the double foot yarns may be thrown in at an exact point on the knitting machine to cause the double sole to be made shallower or deeper at the will of the operator.

Another important object of the invention is to provide a device of this character which may be readily and easily installed on knitting machines, eliminating the necessity of making alterations in the knitting machine construction to apply the device.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawing:

Figure 1 is a perspective view disclosing the machine head, cylinder and needles supported thereby.

Figure 2 is a perspective view disclosing the cam box as removed from the machine head.

Figure 3 is a sectional view taken transversely through the cam box illustrating the relation of the cam with the needles.

Figure 4 is a front elevational view of the cam and arm supporting the same.

Referring to the drawing in detail, the reference character 5 indicates a machine head and the reference character 6 indicates the cylinder of a knitting machine.

The needles are indicated at 7 and are of the usual construction employed for knitting stockings, socks or the like and include long butt, short butt and medium butt types.

The cam box forming a part of the usual knitting machine is indicated at 8 and includes a base 9 formed with an opening 10 through which the adjusting screw 11 operates, which adjusting screw allows the cam box to be moved with respect to the machine head.

A slot 12 is formed in the cam box and provides a clearance for the cam 13 formed at the free end of the arm 14 which is secured to the cam box by means of the set screw 15 in a manner to permit of adjustment of the arm 14 towards and away from the cam bar, or cylinder associated therewith.

The needle butts are indicated at 16 and as clearly shown by Figure 3 of the drawings, the cam 13 is adjusted to miss the medium butt needles and short butt needles but contact with the long butt needles to draw them downwardly in the knitting of the stocking or sock, allowing the finger that carries the yarn to drop in and catch on the medium butt needles after the cam has forced the long butt needles downwardly out of action.

An extension 17 forms a part of the arm 14 and is supplied with a threaded opening extending transversely therethrough for the reception of the adjusting screw 18 which is adapted to contact with the cylinder adjacent to the lower end thereof as clearly shown by Figure 3 to move the cam 13 within the cut out portion 12, to adjust the cam with respect to the needle butts.

The set screw 19 operates through the extension 17 and is designed to engage the adjusting screw 18 to lock the adjusting screw against movement after an adjustment of the cam has been made to cause the cam to operate on certain needles.

From the foregoing it will be obvious that as the cylinder rotates during the knitting operation, the butts of certain needles will be engaged by the cam and forced downwardly allowing the finger that carries the yarn to drop in and catch on the remaining needles after certain needles have been pulled down out of action.

Should it be desired to adjust the cam so that the long butt needles and the medium butt needles will be engaged thereby and moved downwardly, the adjusting screw 18 may be moved accordingly to allow the cam 13 to extend into engagement with the medium butt needles as well as the long butt needles.

We claim:—

In combination with a machine head cylinder and needles carried thereby, a cam

box supported by the machine head and having an inclined slot formed therein, a curved arm having an opening adjacent to one end thereof, a screw positioned in the opening for securing the arm in its positions of adjustment, a cam carried at the free end of the arm and adapted to extend through the slot, said cam adapted to engage needle butts of the machine, an extension forming a part of the arm and having a threaded opening, an adjusting screw extending through the extension and adapted to contact with the cam box to adjust the cam towards or away from the needle butts.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures.

WALTER L. DENSON.
GEORGE E. BRUMITT.