

W. J. McDEVITT.
Cam for Knitting-Machine.

No. 202,567.

Patented April 16, 1878.

FIG. 1.

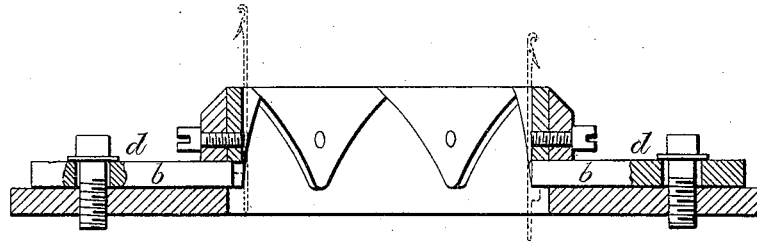


FIG. 2.

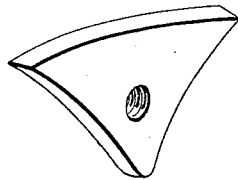


FIG. 3.

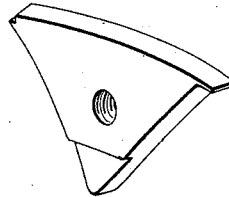


FIG. 4.

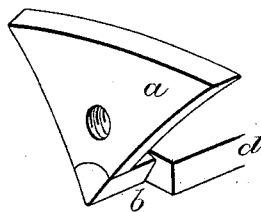


FIG. 5.

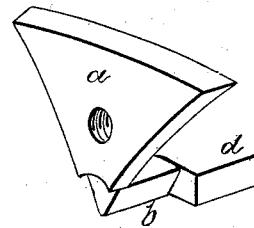
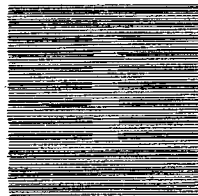


FIG. 6.



Witnesses,

John W. Deemer
Thomas M. Ilvain

Inventor,

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by his Attorneys
Howson and Son

UNITED STATES PATENT OFFICE.

WILLIAM J. McDEVITT, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN CAMS FOR KNITTING-MACHINES.

Specification forming part of Letters Patent No. 202,567, dated April 16, 1878; application filed January 25, 1878.

To all whom it may concern:

Be it known that I, WILLIAM J. McDEVITT, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Cams for Knitting-Machines, of which the following is a specification:

The object of my invention is to so construct the needle-operating cams of a knitting-machine that the latter can be readily adapted for the production of either plain or tuck work; and this object I attain in the following manner, reference being had to the accompanying drawings, in which—

Figure 1 is a sectional view of an ordinary circular head provided with two of my improved cams; Fig. 2, a perspective view of an ordinary plain cam; Fig. 3, a perspective view of an ordinary tuck cam; and Figs. 4 and 5, perspective views of my improved cam.

Ordinary knitting-machines, for the production of plain or horizontal striped work, are provided with cams of the character shown in Fig. 2; and when it is desired to produce what is known as "tuck" work—that is, work in which the continuity of the horizontal stripes is interrupted at one or more points, so as to produce the effect of a vertical stripe, as shown in the diagram, Fig. 6—it becomes necessary to remove one or more of the plain cams and substitute therefor cams of the character shown in Fig. 3. These cams are reduced in thickness at the bottom, so that the needles having recessed projections, or, as they are technically termed, "cut steels," will not be acted upon by the lower ends of the cams, the effect of this being that the needles are not depressed to such a point that they will throw off their stitches, the latter not being

thrown off until the next plain cam is reached, the new thread, in the meantime, being merely laid straight along the back of the fabric.

It is not practicable, according to this plan, to change the cams except at comparatively long intervals, owing to the fact that the entire head has to be taken apart when such a change is to be made.

The object of my invention is to effect the changing of the cams during the working of the machine, and at intervals as short as may be desired. This object I attain by cutting away the lower end of the cam *a* and adapting to the cut portion a block, *b*, which, in the present instance, is carried by an arm, *d*, so that by adjusting said arm the face of the block *b* may be brought out flush with the face of the cam *a*, so as to form a plain cam, as in Fig. 4, or may be withdrawn so as to form a tuck-cam with a recessed lower end, as shown in Fig. 5.

The arm *d* may be placed under the control of a suitable pattern device, so that the changing of the cams may be effected automatically to accord with the desired pattern of the work to be produced.

I claim as my invention—

The combination of the cam *a* with the block *b*, forming part of the cam, but rendered adjustable transversely, all substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WM. J. McDEVITT.

Witnesses:

HARRY A. CRAWFORD,
HARRY SMITH.