

No. 743,713.

PATENTED NOV. 10, 1903.

M. GORMAN.
CAM.

APPLICATION FILED MAY 4, 1903.

NO MODEL.

Fig. 1

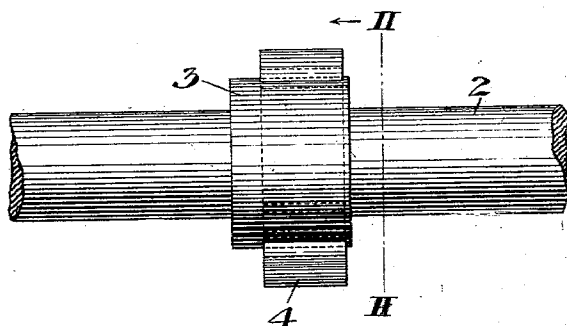


Fig. 2.

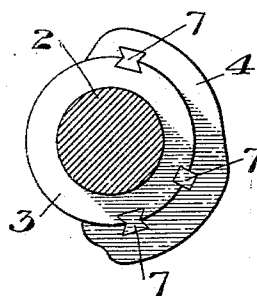


Fig. 3.

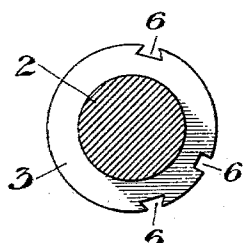
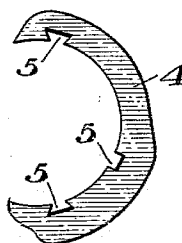


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

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CAM.

SPECIFICATION forming part of Letters Patent No. 743,713, dated November 10, 1903.

Application filed May 4, 1903. Serial No. 155,864. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL GORMAN, of Braddock, Allegheny county, Pennsylvania, have invented a new and useful Improvement in Cams, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 shows in plan view a shaft provided with a cam constructed in accordance with my invention. Fig. 2 is a vertical section on the line II II of Fig. 1. Fig. 3 is a similar section showing the shaft and its collar without the cam-surface, and Fig. 4 is a detached view of the annular section which constitutes the cam-surface.

In the operation of wire-nail machines, where heavy work is required to be performed by the gripping-dies by which the wire is held during the heading operation, difficulty has been experienced owing to the rapid wear of the cams by which these parts are actuated. Such wear impairs the adjustment of the machine and necessitates frequent renewals and repairs. These difficulties are obviated by my invention.

In the drawings, 2 represents a shaft having formed thereon, preferably integral therewith, a collar 3, which forms a seat and support for the detachable cam-section. This cam-section, as shown in Figs. 2 and 4, consists of a section of a ring, which internally is formed, preferably, on the arc of a circle, so as to fit the surface of the collar 3, and on its exterior is shaped so as to afford the desired outline of the cam. On the inner surface of the ring are key-slots 5 5, some of which are dovetailed in shape, and these slots are adapt-

ed to register with corresponding slots 6 6 on the surface of the collar 3.

The cam-section is fitted on the collar and extends partially around the circumference thereof, and keys 7 are inserted in the registering slots, so as to hold the cam-section securely to the collar. The cam-section and collar thus constitute conjointly a complete cam-surface, and when the cam-section 1, on which the work of the cam falls, becomes worn, so that it is necessary to be replaced, it may be detached by taking out the keys and may then be taken from the shaft without removing and stripping the shaft, as heretofore. Another cam-section may then be keyed to the collar.

I claim—

1. In a cam, the combination of a shaft, having a collar and a section of a ring extending partially around the circumference of the collar and detachably connected therewith, the circumference of the cam being constituted conjointly by the section and the collar; substantially as described.

2. In a cam, the combination of a shaft having a collar and a section of a ring extending partially around the circumference of the collar and keys detachably connecting the collar and section, said keys fitting in registering slots in the outer circumference of the collar and the inner circumference of the cam-section; substantially as described.

In testimony whereof I have hereunto set my hand.

MICHAEL GORMAN.

Witnesses:

REINHOLD BECKMAN,
IRA GRIBBEN.