

G. P. BAUMANN,
CAM FOR WIRE STITCHING MACHINES,
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1,237,604.

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Fig. 1.

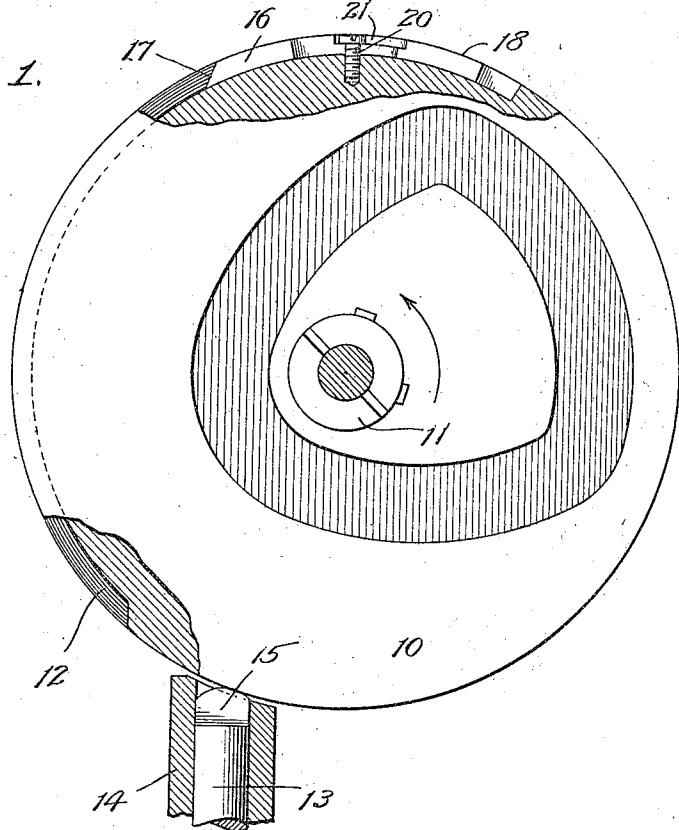
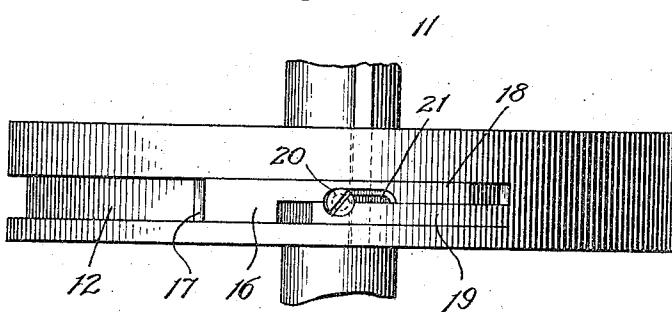


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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CAM FOR WIRE-STITCHING MACHINES.

1,237,604.

Specification of Letters Patent. Patented Aug. 21, 1917.

original application filed August 27, 1914, Serial No. 858,796. Divided and this application filed December 12, 1916. Serial No. 136,517.

To all whom it may concern:

Be it known that I, GOTTFRIED P. BAUMANN, a citizen of the United States, residing at Chicago, in the county of Cook and 5 State of Illinois, have invented a new and useful Improvement in Cams for Wire-Stitching Machines, of which the following is a specification.

My invention relates to improvements in 10 cams and more particularly to a specific form of grooved cam especially designed for use on wire stitching machines.

The present application is a division of my earlier application, Serial No. 858,796, 15 filed August 27, 1914.

The present invention will be fully understood from the following specification taken in connection with the accompanying drawings. In these drawings Figure 1 is a front 20 face view, partly in section, of my new cam, together with the cam-follower which operates therewith; and Fig. 2 is a top plan view showing the adjustable segment in the cam-groove.

25 In wire stitching machines of the type disclosed in my prior application referred to it is of importance that the movements of the various operative portions of the machine be timed with the greatest accuracy. For securing such accurately timed motions cams and cam-followers are employed, and my present invention is specifically concerned with a construction of cam by which the highest degree of accuracy in timing may 30 be secured and maintained throughout the life of the machine. These results are secured by the cam construction illustrated in the drawing and hereinafter particularly described.

40 This construction includes a cylindrical or drum cam 10 mounted on a suitable shaft 11 and having a cam-groove or track 12 of appropriate length formed in its peripheral surface. For coöoperating with the cam 10 there is provided a reciprocating cam-fol- 45 lower 13 guided by a bushing 14 and having its upper end 15 suitably formed to ride upon the surface of the cam 10 and drop into the groove 12 therein at timed intervals.

50 At the trailing end of the groove 12 there is provided an adjustable abutment or end-section comprising an arcuate block 16 having its leading edge 17 properly beveled for coöperation with the cam-follower 15, the

member 16 being reduced in width intermediate its length and adapted for angular adjustment with relation to the body of the cam. The reduced section 18 of the adjustable cam-member is complementary to an arcuate filler-strip 19 which lies in the trailing end of the groove 12, this filler-strip and the complementary-reduced section of the adjustable cam-member together occupying the full width of the cam-groove. The filler-strip 19 is designed to remain in 60 the position shown in the drawings, being held in such position by a machine-screw 20 tapped into the body of the cam and having its head entering a semi-cylindrical counterbore in the outer face of the filler-strip. The 65 adjustable cam-member 16 has an inwardly-facing slot 21, the edge of which is rabbed to receive the head of the screw 20.

70 By the construction above described the effective length of the cam-groove 12 may be 75 altered at will by the adjustment of the member 16, the screw 20 being loosened for this purpose and tightened when a proper adjustment has been effected, to hold the parts in their set position.

80 In the construction I have illustrated in the drawings the beveled edge 17 at the trailing end of the cam-groove will be the 85 wearing surface of the cam, this surface acting to forcibly drive the follower 13 outward as the cam rotates. It will be this surface, therefore, which will first show signs of deterioration under use, such deterioration being evidenced by the wearing 90 of the head 17. Such wear may be compensated for, however, by loosening the screw 20 and sliding the cam-member 16 forwardly in the groove through a proper distance. By this means the desired timing of the 95 movements of the cam-follower 13 will be maintained. Since the adjustable member 16 is separate from the cam it is furthermore possible to construct this element of a material better adapted for the service 100 which it renders than is the material used in the body of the cam itself.

105 By reason of the lap-joint construction of the adjustable cam-member 16 and filler 19 the longitudinal adjustment of the former does not in any way affect the operation of the cam-follower after it has passed the beveled edge 17, the follower riding over the surfaces of the adjustable cam-section and

filler-strip along their median lines and being held constantly in its outer position.

While I have shown and described in considerable detail one specific embodiment of my invention it will be understood that this is illustrative only and for the purpose of making my invention more clear, and that I do not regard my invention as limited to these details or to any of them, except in so far as I have included such limitations within the terms of the accompanying claims, in which it is my intention to claim all novelty inherent in my invention as broadly as is permissible in view of the prior art.

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

1. A cam comprising a cam-disk having a track formed in its periphery, a segment

having an inclined end mounted in said track, and means for adjustably securing said segment to said cam.

2. A cam comprising a body-portion over the surface of which a cam-follower travels, and a separable member secured to the said body and extending from the face of the cam in the path of said follower, and means for adjusting said separable portion.

3. A cam-disk comprising a body-portion having a separate member set into its operative face and means for adjusting said member in the direction of its movement.

4. A cam comprising a disk-like body-portion having a peripheral cam-groove, one end of said groove being formed by a peripherally-adjustable section.

GOTTFRIED P. BAUMANN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."