

No. 630,227.

Patented Aug. 1, 1899.

R. M. HOLT & P. L. HAZLEWOOD.

PICKER CAM POINT.

(Application filed Oct. 7, 1898.)

(No Model.)

Fig. 1.

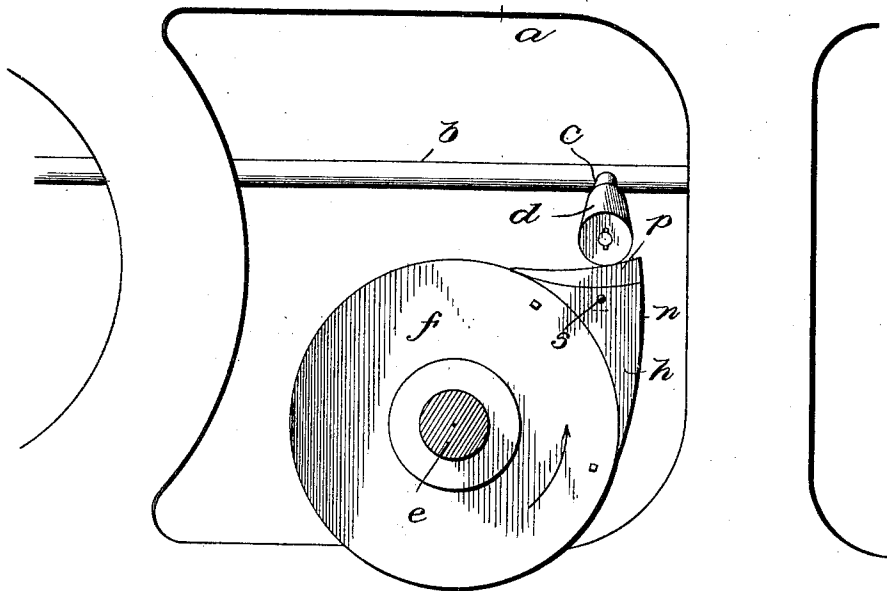


Fig. 2.

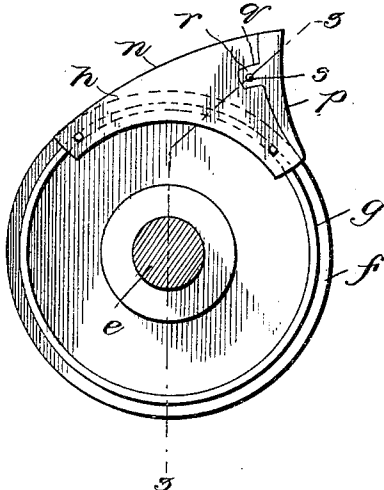


Fig. 4.

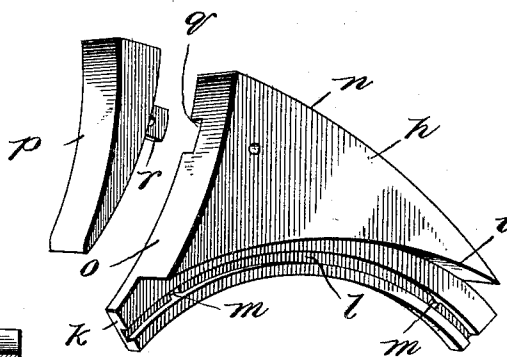
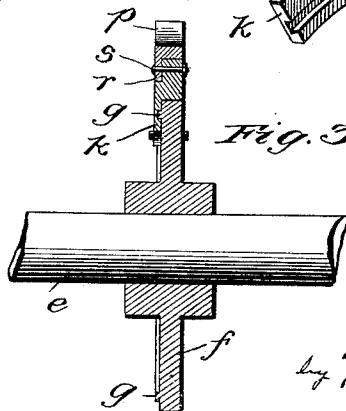


Fig. 3.



Witnesses
A. M. Harrison

Inventors
Robert M. Holt
and
Peter L. Hazlewood
by *Wright, Brown & Quincy*
Attorneys

UNITED STATES PATENT OFFICE.

ROBERT M. HOLT AND PETER L. HAZLEWOOD, OF BURLINGTON, NORTH CAROLINA.

PICKER-CAM POINT.

SPECIFICATION forming part of Letters Patent No. 630,227, dated August 1, 1899.

Application filed October 7, 1898. Serial No. 692,922. (No model.)

To all whom it may concern:

Be it known that we, ROBERT M. HOLT and PETER L. HAZLEWOOD, of Burlington, in the county of Alamance and State of North Carolina, have invented certain new and useful Improvements in Picker-Cam Points for Looms, of which the following is a specification.

This invention relates to improvements in the cam mechanism for operating the picker-staffs of looms, and the invention has particular reference to the picker-cam of the type employed in machines known as "Crompton looms." In looms of this type it has been customary to form the picker-cam in two parts, one of which comprises a disk on a shaft, and the other consists of a casting weighing about three pounds bolted to said disk. When the striking-surface of this cam becomes worn, the entire casting must be removed and replaced by a new one, resulting not only in a waste of material, but in considerable trouble in effecting the change. Furthermore, it is more or less difficult to secure the most durable wearing-surface on a casting of this weight.

The object of the present invention is to produce a cam or picker point for looms which possesses the highest degree of efficiency and durability at the minimum of expense; and to this end the present invention consists in forming the cam or picker point of two parts adapted to be connected together and attached to the rotary disk, all as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents an elevation of so much of the loom as is necessary to illustrate the invention. Fig. 2 represents an elevation of the improved cam looking from the side opposite to that represented in Fig. 1. Fig. 3 represents a section on line 3 3 of Fig. 2. Fig. 4 represents a perspective view of the two parts of the picker-point separated from each other.

The frame of the loom is indicated at *a*. This, as above stated, may be understood to represent a portion of the frame of a Crompton loom.

One of the shafts for operating the picker-staff by means of the usual connections is in-

dicated at *b*, said shaft being rocked in one direction on its axis by means of a cam and in the other direction by means of a spring. (Not shown.) The arm which bears on the cam is indicated at *c* and is shown as provided with the usual roll *d*.

The cam-shaft *e* carries the disk *f*, which is preferably provided with a rib *g* on one side, near its periphery, and supports and carries the cam-point, which heretofore has been made in one piece, but which according to the present invention is constructed in two parts and attached as hereinafter described, whereby certain definite advantages are obtained, as will appear.

The block *h* is formed with a concave edge *i*, to rest on the periphery of the disk *f*, and with a flange *k*, which overlaps the side of the disk, said flange being formed with a groove *l*, to receive the rib *g* of the disk, and with holes *m*, through which suitable bolts pass to secure the block permanently to the disk. The block *h* is formed with a convex edge *n*, over which the roll *d* rides in returning from the tip of the cam, and with a concave edge *o*, against which the picker-point proper or striking-surface piece or facing-block is held. This facing-block is indicated at *p* and has a convex rear edge to fit and rest against the concave edge *o* of the supporting-block *h*, the latter being provided with a groove or recess *q* in one side to receive a lug *r* formed at the rear of the facing-block. A bolt *s* passes through a hole in the lug *r* and a hole in the supporting-block to hold the two blocks together.

It will be observed that the supporting-block *h* is of an approximately triangular shape and so secured to the disk *f* that when the facing-block *p* is in position and the disk rotated in the direction of the arrow in Fig. 1 the force of the blow and the wear resulting therefrom when the machine is in operation are entirely taken up by the facing-block, while the latter is firmly supported by an elongated backing comprising the block *h*. It will also be observed that owing to the shape of the two blocks and their connection, as described, the impact against the striking-surface is in a direction that merely tends to press the fac-

ing-block against the supporting-block, without tendency to move the former in an end-wise direction. Hence the single bolt *s* is sufficient to unite the two blocks, and when a
5 new facing-block is required there is but one bolt to be removed and replaced.

The block *p* being comparatively small is easily handled and is cheaper than an entire cam or picker point made in one piece. Furthermore, said block *p* can be more readily
10 case-hardened than a large casting such as heretofore employed.

Practically, the block *h* will last as long as the disk *f* and may be considered as a permanent part thereof, although it is preferably
15 removable therefrom. Since the edge of this block or projection from the disk which supports the comparatively thin facing-block is formed so that the striking-surface of the
20 latter is in a plane substantially at a right angle to the path of movement of the roll *d*, there is little or no tendency to displace the facing-block from its position, as above described.

Having now described our invention, what we claim is—

1. A picker-cam for looms comprising the disk *f* and the block *h* secured thereto and having the concave edge *o* and the recess *q* in one side thereof, the facing-block *p* having
30 a convex rear edge and provided with lug *r* fitting said recess, and the bolt *s* for securing the lug in said recess.

2. A picker-cam for looms comprising the disk *f* having rib *g*, the block *h* having recess
35 *q* and the flange *k* provided with groove *l* fitting the rib *g*, means for securing the block to the disk, the facing-block *p* having lug *r* fitting the recess *q*, and the bolt *s* for securing the lug in said recess.

In testimony whereof we have affixed our
40 signatures in presence of two witnesses.

ROBERT M. HOLT.
PETER L. HAZLEWOOD.

Witnesses:

J. G. KING,
C. W. HOLT.