P. R. GLASS.

SKIVING MACHINE.

APPLICATION FILED OCT. 13, 1906.

924,657. Patented June 15, 1909.

Fig. 1.

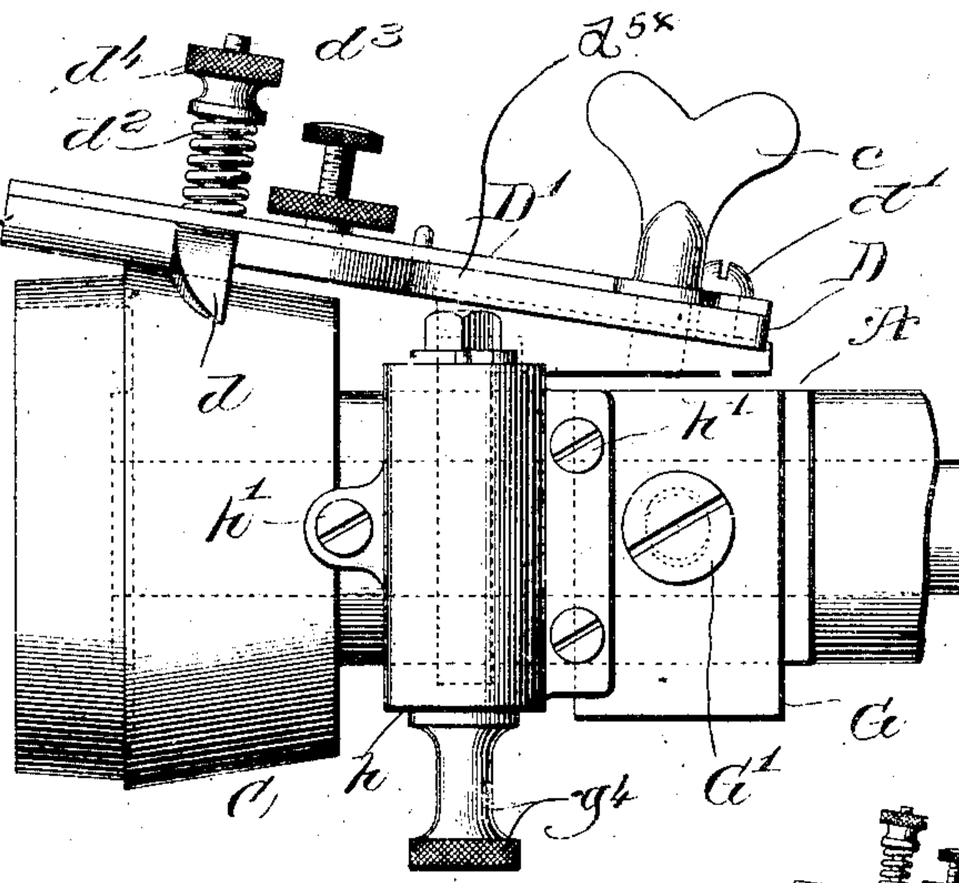


Fig. 2.

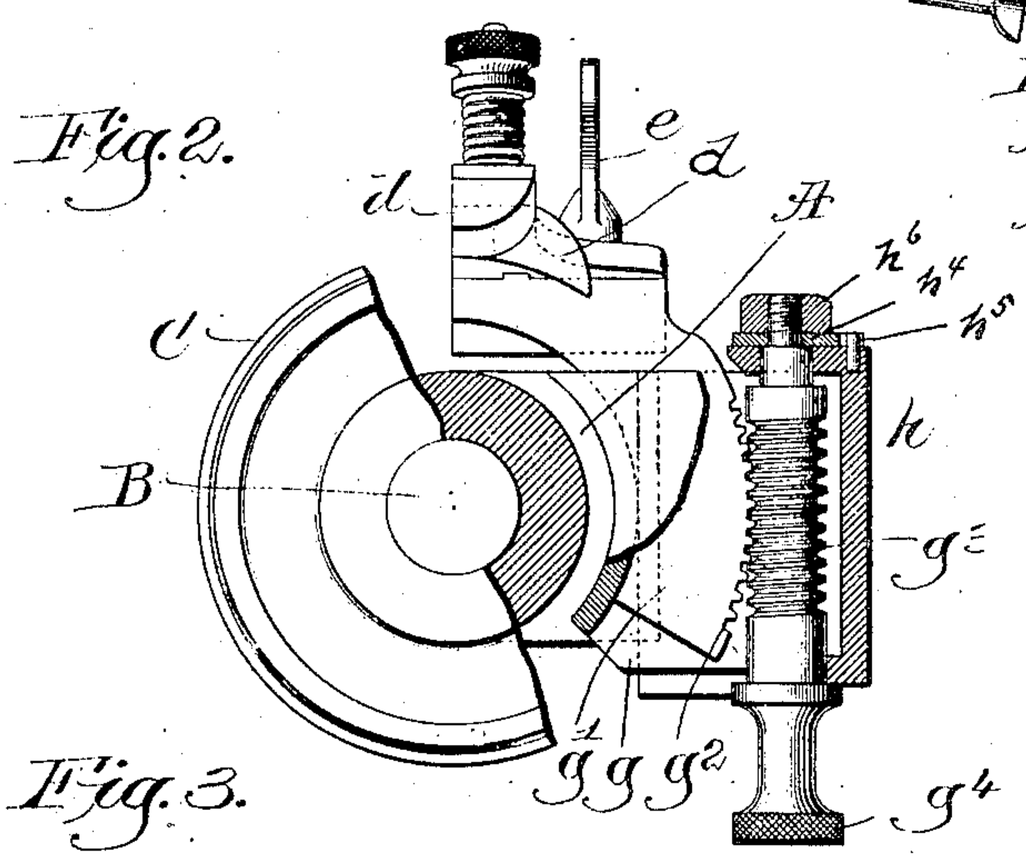


Fig. 4.

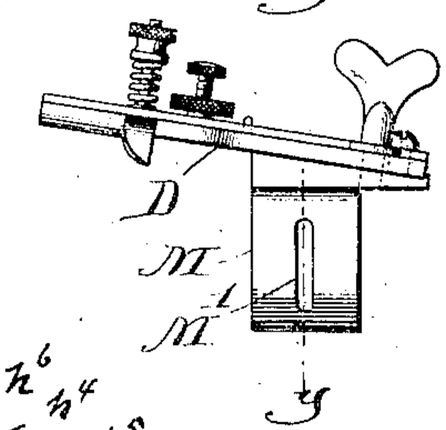


Fig. 5.

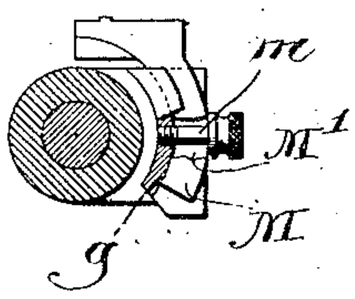
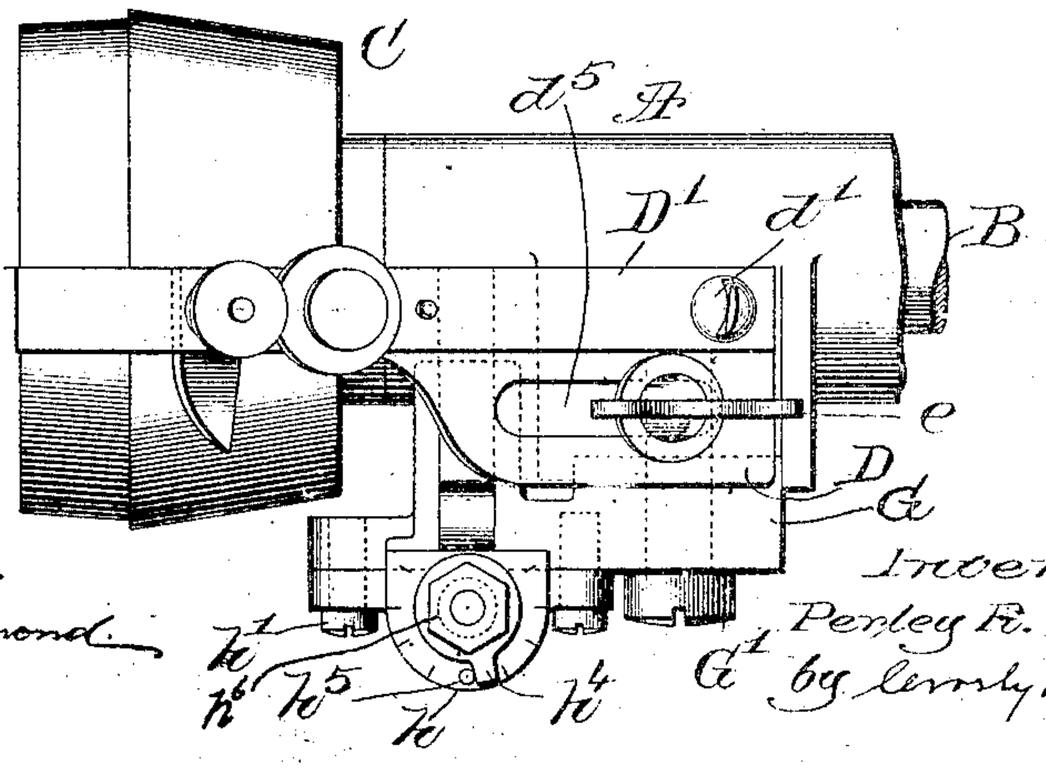


Fig. 3.



Witnesses.

Thomas L. Drummond.

Joseph M. Ward.

Inventor.

Perley R. Glass,

by Lemly & Fugon

Attys.

UNITED STATES PATENT OFFICE.

PERLEY R. GLASS, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE PEERLESS MACHINERY COMPANY, OF BOSTON, MASSACHUSETTS.

SKIVING-MACHINE.

No. 924,657. Specification of Letters Patent. Patented June 15, 1909.

Application filed October 13, 1906. Serial No. 338,844.

To all whom it may concern:

Be it known that I, PERLEY R. GLASS, a citizen of the United States, residing in Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Skiving-Machines, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

In the use of skiving machines employing circular or disk cutters, it is frequently necessary to adjust the cutter so that its edge moves in a path more or less distant from a vertical line intersecting the longitudinal axis of a feed wheel, such adjustment being required in order to afford the proper space between the cutter and the top of the feed wheel, and to adapt the machine to the class of stock being skived, as the same varies in hardness and also in thickness. The gage must, for the best work, occupy a position as close as possible to the edge of the knife, and the gage must be adjusted with relation to the feed wheel to properly present the material to the cutter in the varying position of the gage.

The adjustment of the gage transversely with relation to the length of the feed wheel is in practice spoken of as the "over center" adjustment and the change of position of the gage with relation to a vertical line intersecting the longitudinal center of the feed wheel increases the space between the under side of the foot or edge bearing portion of the gage and the top of the feed wheel. Heretofore, making this "over center" adjustment has required very considerable time, and frequently the bottom or foot of the gage next the periphery of the feed wheel has to be filed to adapt the same to its new position. In accordance with my invention I have combined with a gage means whereby the same may be adjusted in a circle about the longitudinal axis of the feed wheel sustaining the work that the gage serves to guide, said adjustment being also over the center and being capable of being made easily and quickly, without disturbing the longitudinal adjustment of the gage.

Figure 1 in side elevation shows a gage of usual construction made adjustable in accordance with my invention by means of one good form of adjusting means; Fig. 2 is a left hand elevation of the parts shown in Fig. 1 partially broken out, Fig. 3 is a top or plan view of Fig. 1. Fig. 4 shows a modified form of my invention; and Fig. 5, a section in the line *y*.

In the drawing, the framework A, the shaft B sustained therein and carrying the feed wheel C, and the gage comprising the base D having a leg *d*, and the yielding top plate D′ connected to the base by a screw *d′*, said top plate having a foot or bearing portion $d^{\times}$ are and may be all as common and as shown in an application Serial No. 324,134 filed June 30, 1906.

The base D is slotted at d^5 and the slot embraces a fin or projection $d^{5\times}$ to guide the base of the gage when the latter is being adjusted longitudinally of the shaft B on the block G to which said base is connected by a thumb screw *e* having a threaded base that enters a threaded hole in the gage sustaining block G, said block being connected to the framework by a screw G′.

The block G, see Fig. 2, is concaved at its inner edge to fit the frame part A and is grooved to constitute a raceway *g* for the reception of an arm or extension *g′* represented as segmental in shape, said arm being extended from the base of the gage. This extension, as shown in the plan in which I have herein chosen to illustrate my invention in one of its best forms, is toothed as at g^2 that it may be engaged by the teeth of a worm toothed adjusting device g^3, shown as a screw having a milled head g^4 and mounted to be rotated in a cap *h* connected to the block G by screws *h′*. The upper end of the screw has a shoulder that abuts a lip on the cap *h* and the portion of the upper end of the screw that is extended through the cap is unthreaded, presenting a shoulder substantially at the outer edge of the cap beyond which the end of the screw is threaded.

The threaded upper end of the screw receives a washer h^4 provided with a finger, the washer resting on a shoulder of the screw and being clamped thereon by a nut h^6, said washer and finger constituting an index. The cap *h* has a stop h^5 and the upper side of the cap has a scale, as shown in Fig. 3. The index may be rotated when the screw g^3 is rotated and when the index occupies the position, Fig. 3, with the finger against the stop, the back or left hand edge d^{10} of the gage stands practically in a vertical line intersecting the longitudinal axis of the feed wheel, and when the screw is turned to ad-

just the gage over center, the finger of the index traverses over the scale and shows to the operator just the extent of adjustment over center of the gage. The yielding top plate of the gage has a hole through which is extended a screw post d^3 carried by the base D, said post being surrounded by a spring d^2 and having applied to its upper end a nut d^4 which may be adjusted to regulate the pressure of the foot or bearing $d^\times$ on the stock passing between it and the feed wheel.

From the foregoing description, it will be understood that the gage sustaining block G may be adjusted transversely the longitudinal axis of the feed wheel, and that the base of the gage may be adjusted longitudinally on said block.

In the modification Figs. 4 and 5, I have shown the gage body D as provided with an extension M represented as a curved arm concaved at its inner side to fit the portion g of the block G, said extension having a slot m'. I have extended from the portion g a clamp-screw m one end of which is threaded into said portion, the shank of the clamp screw being extended through the slot M', and by loosening the clamp stud the gage may be turned in a circular path about the longitudinal axis of the feed wheel carrying shaft as hereinbefore provided for.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a machine of the class described, a feed wheel, a gage, and means to adjust said gage about the longitudinal axis of said feed wheel.

2. In a machine of the class described, a feed wheel, a gage, and means to adjust said gage over center with relation to the longitudinal axis of said feed wheel.

3. In a machine of the class described, a feed wheel, a block having a raceway, a gage having an extension entering said raceway, and adjusting means co-acting with said extension to adjust said gage transversely with relation to the longitudinal axis of said feed wheel.

4. In a machine of the class described, a feed wheel, a block having a raceway, a gage having a toothed extension entering said raceway, and means engaging the teeth of said extension to adjust the gage transversely to the longitudinal axis of the feed wheel.

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

PERLEY R. GLASS.

Witnesses:

GEO. W. GREGORY,

EVANGELINE C. BROWN.