(No Model.) 2 Sheets—Sheet 1.

C. SEYMOUR.

WOODWORKING MACHINE.

No. 521,185. Patented June 12, 1894.

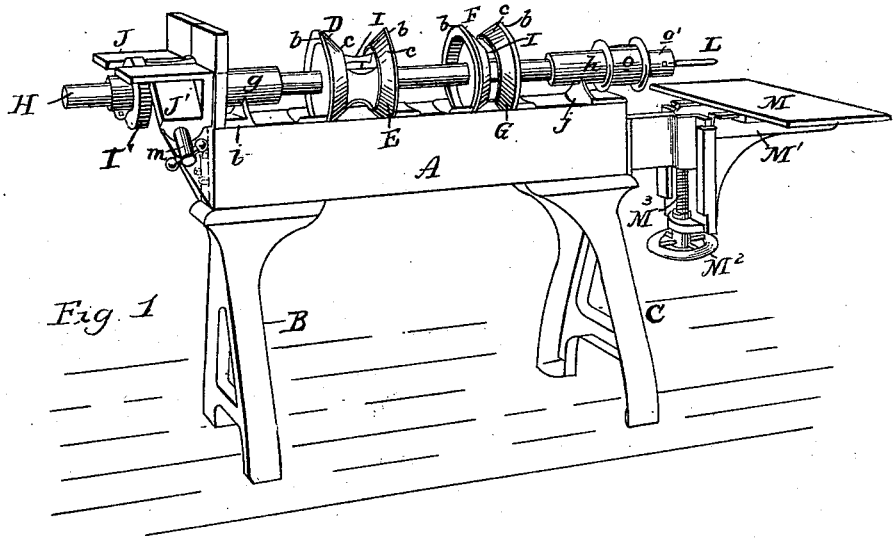

Fig. 1

Fig. 2

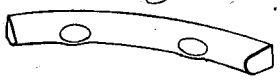

Fig. 3

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(No Model.) 2 Sheets—Sheet 2.

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WOODWORKING MACHINE.

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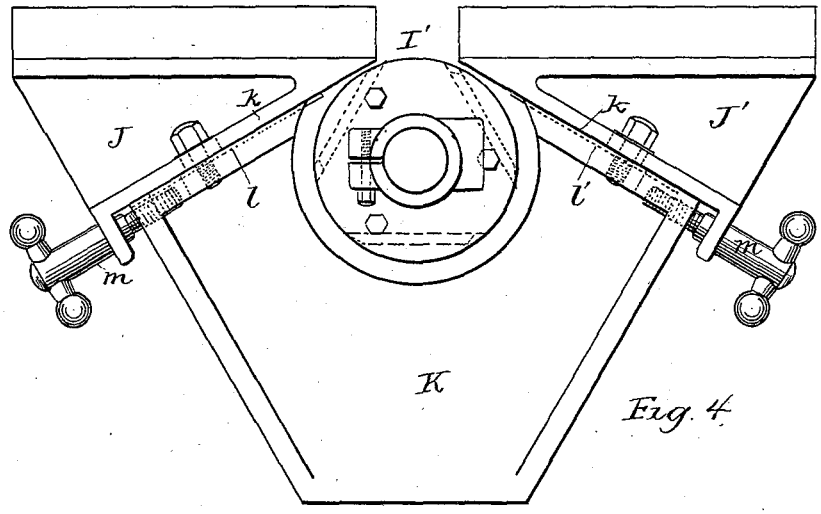

Fig. 4.

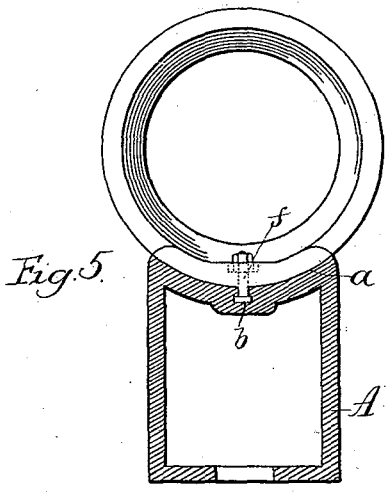

Fig. 5.

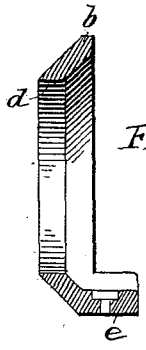

Fig. 6.

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UNITED STATES PATENT OFFICE.

CHARLES SEYMOUR, OF DEFIANCE, OHIO, ASSIGNOR TO THE DEFIANCE MACHINE WORKS, OF SAME PLACE.

WOODWORKING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 521,185, dated June 12, 1894.

Application filed July 29, 1892. Serial No. 441,631. (No model.)

To all whom it may concern:

Be it known that I, CHARLES SEYMOUR, a resident of Defiance, in the county of Defiance and State of Ohio, have invented certain new and useful Improvements in Woodworking-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in wood working machines, and more particularly to machines for chamfering or rounding the corners of wood work,—the object of the invention being to produce a machine for chamfering the corners of wood work and to so construct the machine that the centering of the guards and boxes and their correct alignment will be insured.

A further object is to produce a machine for the purpose stated which shall be simple in construction, neat in appearance and effectual in the performance of its functions.

A further object is to provide a chamfering machine with a planing attachment.

A further object is to construct a chamfering machine so as to admit of the application and use of a bit or auger.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings: Figure 1 is a perspective view of my improved machine. Fig. 2 represents a section of a wagon felly, in perspective, the inner arc of which is shown as having been rounded. Fig. 3 represents a stick of wood with its corners chamfered. Fig. 4 is an end elevation of a planing attachment shown from the position at which the operator stands. Fig. 5 is a section of the bed plate of the machine, surmounted by a guard ring. Fig. 6 is a sectional view of the guard ring.

A, in Figs. 1 and 5 is the bed plate, supported on the legs B and C. The bed plate is cast hollow, as shown in section in Fig. 5 and has its upper surface *a* concave or representing, longitudinally, a section of the inner surface of a cylinder, from end to end. It has also a T-shaped slot *b'*, (inverted,) for the accommodation of bolt heads. The guard rings D, E, F, G, are turned on the surfaces *b*, *c*, *d*, *e*. The extension *e*, Fig. 6, constitutes the foot by which the ring is held by the bolt *f* in the concave trough of the bed plate at *a*. This secures the concentric alignment of all the guard rings. The boxes *g* and *h* in which the shaft H is journaled, also have feet *i* and *j* turned in a lathe so as to conform to the surface *a* and come into alignment with the guard rings. Cutter heads I of the preferred form are located on the shaft H. These cutter heads and a cutter head I' consist of two flanges or plates, between which in dove-tailed grooves, are held three knives in the positions shown by the dotted lines in Fig. 4. Any number of sets, consisting of pairs of guard rings and accompanying cutter heads, may be used, depending on the length of the bed plate A.

The planer attachment, Fig. 4, is furnished with two adjustable tables J and J' having inclined faces *k*, *k* and adjustable on the inclined faces *l*, *l'* by means of screws *m*, *m*. The main piece or bed plate K of the planer attachment is secured, preferably by screws to the end of the main bed plate A.

The cutter head shaft H is driven by the pulley *o*, in the projecting hub *o'* of which, or in the projecting end of the shaft, is socketed a bit or auger L.

M represents a sliding table, gibbed to a bracket M' which is adjustable vertically by means of a hand wheel M^2 and a screw M^3. Thus the parts *o'* L, M M', M^2, and M^3 constitute a boring attachment to the machine.

Slight changes might be made in the details of construction of the machine without departing from the spirit thereof or limiting its scope, and hence I do not wish to limit myself to the precise details of construction herein set forth, but,

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

1. The combination with a hollow bed-plate having a concaved upper surface provided with an inverted T-shaped slot for the accommodation of bolt heads, of guard rings having each an extension which constitutes a

foot whereby it is held by a bolt in the concave upper surface of the bed-plate, substantially as set forth.

2. The combination of a hollow bed-plate having a concaved upper surface and guard rings secured thereto, of a shaft, cutters thereon, and vertical laterally adjustable tables, substantially as set forth.

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

CHARLES SEYMOUR.

Witnesses:
GEO. W. DEATRICH,
MAY E. FISHER.