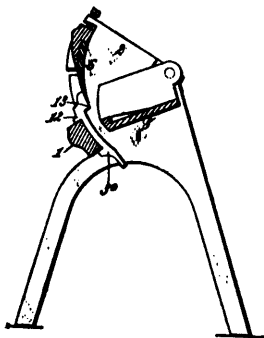


knives, arranged at the ends of the cuter, or extreme stave cutting portions, each having a chamfering cutter and a trimming cutter, the latter continuous with the stave cutting knife, and the former arranged at an angle therewith, a crozing cutter being interposed between and forming an integral part of said cutters, the chamfering cutter being also provided with an equalizing and severing cutter, and a duplex knife arranged between the contiguous ends of said stave cutting knives, and consisting of a central equalizing and severing cutter joined to blades which extend laterally, substantially as described 13th. In a stave cutting machine, the combination, with a knife consisting of a plurality of stave cutting portions adapted to act simultaneously upon a stave bolt, a crozing and chamfering knife having a trimming and chamfering cutter arranged at a suitable relative angle and provided with a crozing cutter lying between and connecting said cutters, the chamfering cutter having an equalizing and severing cutter, a duplex knife arranged between the ends of the adjacent stave cutting sections, and having a central equalizing and severing cutter and two chamfering and two trimming cutters, with two crozing cutters intermediate the chamfering and trimming cutters, and a table on which the stave bolt is placed, substantially as described. 14th. In a stave cutting mechanism, the combination with a table, or support, on which the stave bolt is placed, of a knife having, or consisting of, a plurality of duplicate, stave forming sections fashioned into shape to form from the stave bolt a plurality of similar staves at each single operation, substantially as described. 15th. In a stave cutting mechanism, the combination with a table, or support, on which the stave bolt is placed, of a knife fashioned at its edge to form or serve a plurality of duplicate staves from the stave bolt, at each single operation, substantially as described.

No. 42,819. Stave Cutting Machine.

(Machine à découper les douelles.)

Fig. F.



Luther L. Frierson, Mount Pleasant, assignee of Charles Willis Rich, Summertown, both of Tennessee, U. S. A., 4th May, 1893; 6 years.

Claim.—1st. In a stave cutting machine, the combination with equalizing cutters, of a stave cutting knife having a shear cutting edge and end cutting extensions which slice or plane off the residual portions left on the ends of the stave bolt, substantially as described. 2nd. In a stave cutting machine, a stave cutting knife having a shear cutting edge and provided with longitudinal end extensions having cutting edges which form continuations of the main cutting edge of the knife for slicing or planing off the residual portions left on a stave bolt which is longer than the length of the stave cut therefrom, substantially as described. 3rd. In a stave cutting machine, the combination with stave equalizing cutters, of a stave cutting knife provided with longitudinal and extensions which project past the stave equalizing cutters and have their cutting edges forming continuations of the main cutting edge of the knife for slicing or planing off the residual portions left on a stave bolt which is longer than the length of the stave cut therefrom, substantially as described. 4th. In a stave cutting machine the combination of a stave cutting knife having a shear cutting edge and uniformly curved transversely and longitudinally, with equalizing cutters which equalize the stave at the same stroke that severs it from the stave bolt, substantially as described. 5th. In a stave cutting machine, a stave cutting knife having equalizing cutters and longitudinal end cutting extensions projecting past the equalizing cutters for slicing or planing off the residual portions left on the ends of a stave bolt, substantially as described.

No. 42,820. Cutting Knives for Stave Machines.

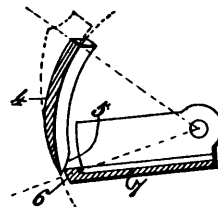
(Couteaux pour machines à douelles.)

Luther L. Frierson, Mount Pleasant, assignee of Charles Willis Rich, Summertown, both of Tennessee, U. S. A., 4th May, 1893; 6 years.

Claim.—1st. A transversely curved stave cutting knife, having a shear cutting edge uniformly curved longitudinally to shear off a

stave from a stave bolt supported in a fixed position on a table, substantially as described. 2nd. The combination of a stave bolt sup-

Fig. 3.

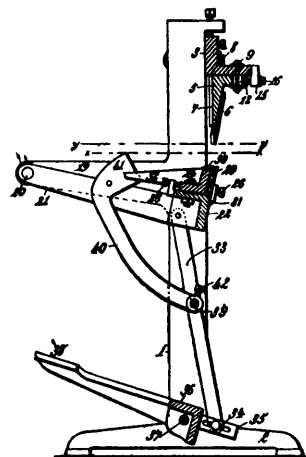


porting table having a uniformly curved cutting edge, and a stave cutting knife, one of the parts moving past the other in cutting a stave, said knife being curved transversely and formed with a shear cutting edge which is uniformly curved longitudinally, substantially as described.

No. 42,821. Stave Jointing Machine.

(Machine pour joindre les douelles.)

Fig. G.



Luther L. Frierson, Mount Pleasant, assignee of Charles Willis Rich, Summertown, both of Tennessee, U. S. A., 4th May, 1893; 6 years.

Claim.—1st. The combination, with a stave cutting rest, of a knife bar, a jointing knife composed of a single continuous strip of elastic metal, a series of independently adjustable plates carried by and bodily movable back and forth on the knife bar, and secured to the elastic knife to constitute a substantially continuous support therefor along its length, and adjusting devices carried by the knife bar and acting upon the adjustable plates to independently adjust them, and spring the knife into curves of greater or less radii, substantially as described. 2nd. The combination of an oscillating table having an adjustable elastic cutting rest, a knife bar which is supported in a fixed position during the stave jointing or trimming operation, a series of independently adjustable plates suspended from and bodily movable back and forth on the knife bar, and secured to the elastic knife to constitute a substantially continuous support for the same along its length, and adjusting devices carried by the knife bar, and acting upon the adjustable plates to independently adjust them, and spring the knife into curves of greater or less radii, substantially as described. 3rd. The combination, with a stave cutting rest, of a knife bar, a jointing knife composed of a single continuous strip of elastic metal having a series of laterally projecting cutting portions at its cutting edge, a series of independently adjustable plates carried by and bodily movable back and forth on the knife bar, and secured to the elastic knife to constitute a substantially continuous support therefor along its length, and adjusting devices carried by the knife bar and acting upon the adjustable plates to independently adjust them and spring the knife into curves of greater or less radii, substantially as described. 4th. The combination of an oscillatory table, an elastic cutting rest, a series of plates adjustable on the table and secured to the elastic cutting rest to constitute a substantially continuous support therefor along its length, a knife bar, an elastic trimming or jointing knife, a series of independently adjustable plates carried by and bodily movable back and forth on the knife bar, and secured to the elastic knife to constitute a substantially continuous support therefor along its length, and adjusting devices carried by the knife bar, and acting upon the adjustable plates to