No. 619,298. Patented Feb. 14, 1899.

E. D. GOCHNAUR.

WOOD GRAINER.

(Application filed May 5, 1898.)

(No Model.)

Fig. 1.

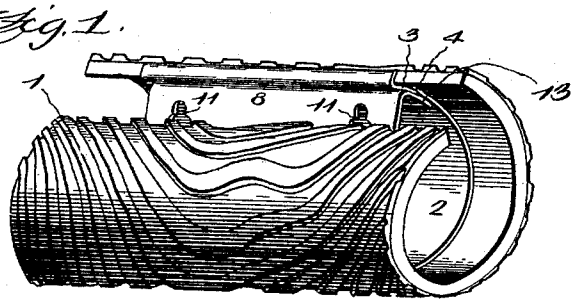


Fig. 2.

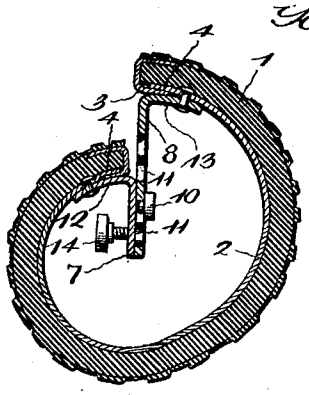


Fig. 3.

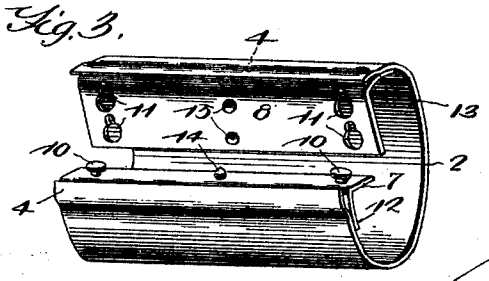


Fig. 4.

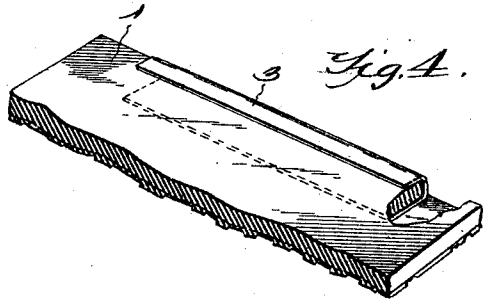
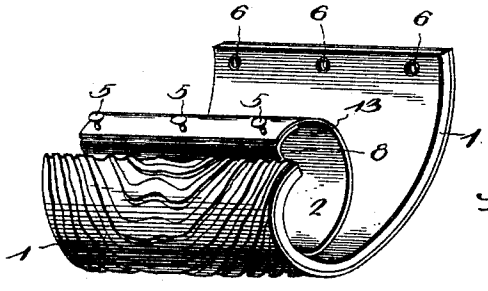


Fig. 5.



Witnesses

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WOOD-GRAINER.

SPECIFICATION forming part of Letters Patent No. 619,298, dated February 14, 1899.

Application filed May 5, 1898. Serial No. 679,795. (No model.)

To all whom it may concern:

Be it known that I, EMANUEL D. GOCHNAUR, a citizen of the United States, residing at York, in the county of York and State of Pennsylvania, have invented a new and useful Wood-Grainer, of which the following is a specification.

The invention relates to improvements in wood-grainers.

The object of the present invention is to improve the construction of wood-grainers and to provide a simple, inexpensive, and efficient tool adapted to be readily operated and capable of being arranged in any desired shape to enable it to operate in the corners and angles of woodwork and conform to the configuration of rounded and depressed portions of the same, so that any character of woodwork may be properly grained.

A further object of the invention is to enable the plate or cover bearing the impression or design to be readily changed, so that different designs may be employed and quickly brought into use.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a wood-grainer constructed in accordance with this invention. Fig. 2 is a sectional view taken transversely of the device. Fig. 3 is a detail perspective view of the resilient supporting device, the ends of the cylindrical body being disengaged from each other. Fig. 4 is a detail perspective view of one end of the plate or cover, showing the inner face thereof and illustrating the construction of the flange which engages the resilient supporting device. Fig. 5 is a perspective view illustrating another construction for detachably interlocking the flexible plate or cover with the supporting device.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a flexible plate or cover preferably constructed of vulcanized rubber and provided at its outer face with a suitable design which is impressed on the surface of the plate or cover under a high pressure and temperature, and by constructing the flexible plate or cover in this manner it is unaffected by oil or terpentine, which will cause ordinary rubber to become hardened and useless.

The ends of the flexible plate or cover are detachably interlocked with a resilient supporting device consisting of a sheet of resilient material, such as thin steel, arranged in the form of a roll 2 and having its ends detachably interlocked and adjustably connected, whereby the ends of the flexible covering are adapted to be separated or arranged at different distances from the center of the roll to adapt the device for graining flat surfaces and to adapt it to enter corners and angles. The flexible strip may be provided at its ends with inwardly-extending flanges 3 to engage corresponding flanges 4, preferably formed by the projecting edges of the material of which the roll is constructed, and when the parts are interlocked in this manner the flexible plate is placed on the roll by sliding it on the same from one end thereof, and the parts are separated by sliding the plate or cover longitudinally of the roll by a reverse movement.

Instead of providing interlocking flanges for securing the flexible plate or cover to the supporting device the parts may be interlocked by the construction illustrated in Fig. 5 of the accompanying drawings, which construction consists of a series of projecting pins 5 and sockets 6. The pins 5 are mounted on the roll, and the sockets 6, which are engaged by the pins, are formed in the inner face of the sheet or cover. The flexible plate or cover may be readily unbuttoned from the roll when the latter has its ends disengaged from each other; but when the ends of the material of which the roll is constructed are interlocked there is no liability of the projections becoming accidentally disengaged from the sockets.

The resilient roll is provided with inwardly-extending plates or pieces 7 and 8, extending longitudinally of the roll and detachably interlocked with each other by means of headed studs 10 and keyhole-slots 11. The plates 7 and 8 are provided at their outer edges or points of attachment to the resilient roll with flanges 12 and 13, which are riveted or otherwise secured to the metal of the roll, project-

ing edges of the latter being provided to form the said flanges 4. The flanges 4 are spaced from the plates or pieces 7 and 8 to provide recesses to receive the flanges 3 of the flexible plate or cover.

The plate 7, which carries the studs, is narrower than the plate 8, which has its keyhole-slots in diametrical series, the studs being adapted to engage either the inner or outer slots, as desired. The studs are retained in engagement with the contracted portions of the keyhole-slots by means of a set-screw 14, mounted in a threaded portion of a narrow plate 7 and adapted to engage indentations 15 of the wider plate 8.

The device is adapted to be used when the headed studs are arranged in either the inner or outer keyhole-slots, and when in the former the device is particularly adapted for graining in angles and recesses, while the other arrangement is especially adapted for graining substantially flat surfaces. The supporting device with which the flexible plate or cover is detachably interlocked terminates short of the side edges of the same and forms by this arrangement a firm and solid central portion for the grainer and provides pliable ends which are adapted to conform readily to the configuration of any character of woodwork and fit in hollows or yield to convex or raised portions, so that the device will be adapted for operating on all kinds of surfaces.

The device is operated by drawing it over the surface to be grained and is not designed to be used as a roller, and while it is adapted to produce a grain in perfect imitation of natural wood the design is not repeated, but is ever changing, and by varying the angle of the device and arranging it in a different position on the surface to be grained the design is correspondingly varied.

The invention has the following advantages: The device, which is simple and comparatively inexpensive in construction, enables the flexible plates or covers to be readily interchanged, so that different designs may be employed for representing the grains for various kinds of wood. The central portion of the device is firm and solid, while the ends are flexible and adapted to yield automatically to the character of the surface to be grained, and the form of the supporting-roll may be changed to enable the device to operate in corners and angles, and the flexible plate or cover can also be used without the supporting-roll.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

What I claim is—

1. A device of the class described, comprising a flexible plate having a design on its outer face, and a supporting device consisting of a roll of resilient material adjustably connected at its ends, substantially as described.

2. A device of the class described, comprising a flexible plate provided on its outer face with a design, and a supporting device consisting of a roll of resilient material having its ends detachably interlocked and capable of adjustment radially of the device to vary the distance between the adjacent edges of the plate, substantially as described.

3. A device of the class described, comprising a supporting device consisting of a roll of resilient material having its ends detachably interlocked and capable of adjustment radially of the roll, and a flexible plate carrying a design and detachably interlocked with the supporting device, substantially as described.

4. A device of the class described, comprising a flexible plate, and a supporting device consisting of a roll of resilient material, and the plates or pieces disposed longitudinally of the roll and extending inward from the ends of the material of which the same is constructed, said plates being disposed substantially radially of the roll, and being adjustable on each other, substantially as described.

5. A device of the class described, comprising a flexible plate, a roll constructed of resilient material and provided at the ends of the same with radially-arranged pieces fitting against each other, one of the pieces being slotted, studs mounted on the other piece and engaging the slots, and a fastening device for holding the studs in engagement with the slots, substantially as described.

6. A device of the class described, comprising a resilient roll provided with flanges, and a flexible plate arranged on the roll and having flanges interlocked with the flanges of the roll, whereby the plate is removably secured to the same, substantially as described.

7. A device of the class described, comprising a flexible plate, and a supporting device receiving the plate and terminating short of the side edges thereof, whereby a firm central portion and flexible ends are provided, substantially as described.

8. A graining-tool arranged substantially in the form of a roll, and having a firm or solid central portion and pliable ends adapted to yield to the surface to be grained, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

EMANUEL D. GOCHNAUR.

Witnesses:
CHAS. E. PANCOAST,
JAS. F. MCMENAMIN.