A. E. MOON.

CARRIER CUSHION FOR SANDPAPERING MACHINES.

APPLICATION FILED SEPT. 9, 1918.

1,370,663. Patented Mar. 8, 1921.

Fig. 1

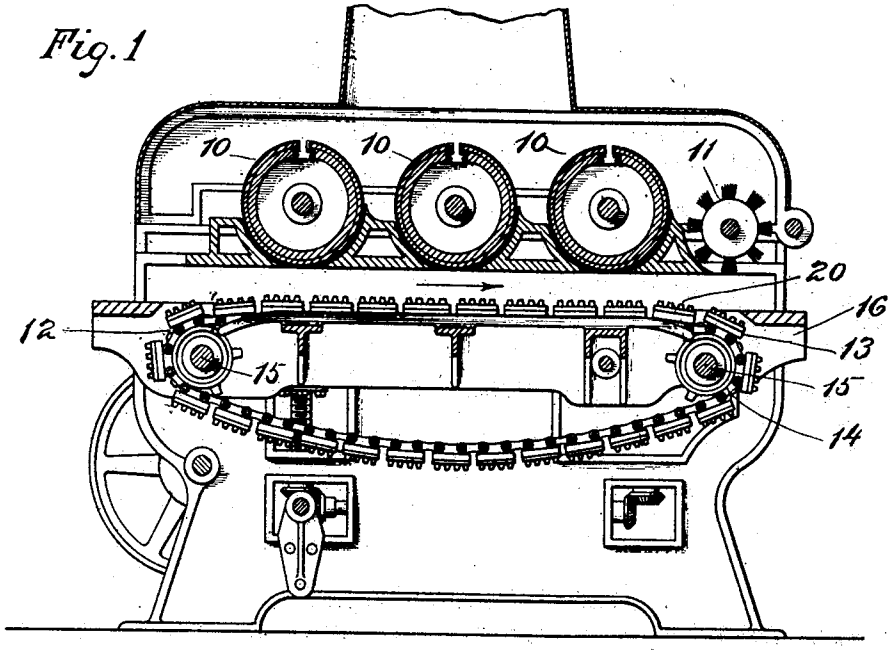


Fig. 2

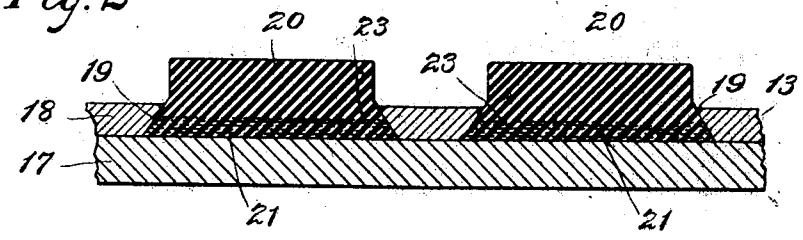


Fig. 4

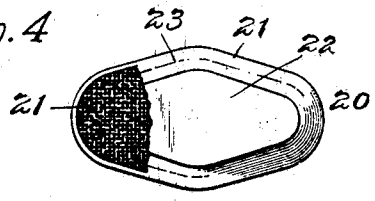
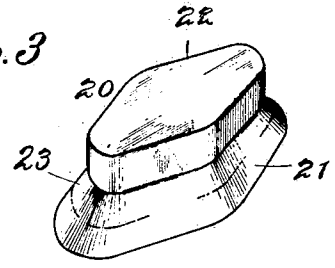


Fig. 3



Inventor
Alfred E. Moon
By Robert M. Pierson
Atty.

UNITED STATES PATENT OFFICE.

ALFRED E. MOON, OF AKRON, OHIO, ASSIGNOR TO THE B. F. GOODRICH COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

CARRIER-CUSHION FOR SANDPAPERING-MACHINES.

1,370,663. Specification of Letters Patent. Patented Mar. 8, 1921.

Application filed September 9, 1918. Serial No. 253,127.

To all whom it may concern:

Be it known that I, ALFRED E. MOON, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented a certain new and useful Carrier-Cushion for Sandpapering-Machines, of which the following is a specification.

This invention relates to machines for sandpapering lumber and similar work, and relates more particularly to the construction of the supporting and driving cushions forming a part of the endless carrier whereby the work is presented to the action of the sanding drums. My principal object is to provide a cushion of greater durability and more secure anchorage than those heretofore employed.

Of the accompanying drawings,

Figure 1 is a longitudinal section illustrating the principal working parts of a sandpapering machine.

Fig. 2 is a section through one of the elements of the carrier taken on a line transverse to the line of movement of the latter and illustrating two of my improved cushion pads.

Fig. 3 is a perspective view of one of the cushion pads.

Fig. 4 is a top plan view thereof partly broken away.

In the drawings, 10, 10 are the abrasive drums of a familiar type of sandpapering machines, and 11 is the dusting or brush roller located posterior to the series of drums. 12 is the usual endless conveyer or carrier composed of slats or sections 13 mounted on a chain 14 which passes around sprockets on a pair of shafts 15, the bearing frame 16 of the carrier being vertically adjustable toward and from the sanding drums.

Each section 13 comprises a foundation plate 17 and a cushion-retaining plate 18 detachably secured thereto and provided with undercut holes or perforations 19 whose sides define the sockets in which are mounted the bases of the cushion pads 20. These pads are composed mainly of soft vulcanized rubber and they collectively form a frictional cushion surface for propelling the work and yieldingly supporting the same while subjected to the action of the sanding drums 10.

Owing to the severe strains to which the cushion pads are subjected, it is a difficult matter to anchor them upon the carrier sections in such manner as to provide the maximum desired propelling and cushioning effect and at the same time avoid the liability of said pads to tear apart or pull out of their retaining sockets. My present invention provides a construction which has proved very satisfactory in use and which consists, as here shown, in incorporating in the base of each cushion pad a number of layers of rubberized fabric, such as ordinary friction fabric, securely vulcanized together and to the main rubber body of the pad and forming a reinforcement 21. It is found that this construction gives just the necessary amount of stiffness to the base, combined with a certain degree of flexibility, and a permanent union between the reinforcement and the body. The active part of the cushion pad is a lozenge-shaped boss or member 22 whose sides are parallel when viewed edgewise of the pad as in Fig. 2, and a taper-edged conoidal base 23 which occupies the retaining socket and spreads or flares outwardly and downwardly from said member. I have found it desirable to make the fabric reinforcement 21 of a thickness somewhat less than the height of the base 23 and occupying the lower part thereof, the soft-rubber body extending into and forming the upper part of said base, this arrangement affording the best cohesion and distribution of strains.

I claim:

1. In an endless carrier for sand-papering machines, a carrier section comprising a foundation plate, a retaining plate having under-cut apertures therein, and a series of soft-topped rubber cushion pads having flared bases provided with multi-ply fabric reinforcements, substantially coextensive with said bases laterally thereof, and clamped against the foundation plate by the overlying sides of said apertures.

2. A cushion pad for endless carriers, said pad being of horizontally-elongated form and provided with a soft-rubber top portion, and a conoidal flared base portion reinforced with plural plies of fabric forming a substantial part of the thickness of the base and substantially coextensive with said base, laterally thereof.

In testimony whereof I have hereunto set my hand this 28 day of August, 1918.

ALFRED E. MOON.