June 14, 1938. A. L. PEARSON 2,120,624

SANDING WHEEL HEAD

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Fig. 1.

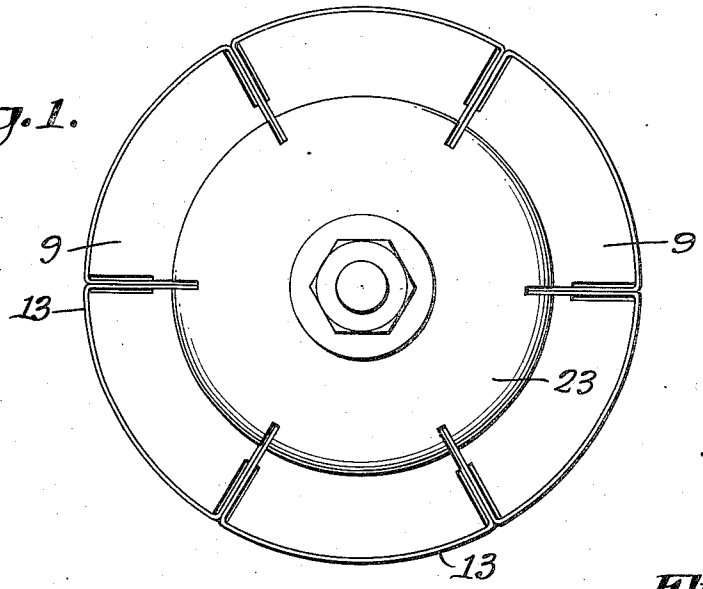


Fig. 2.

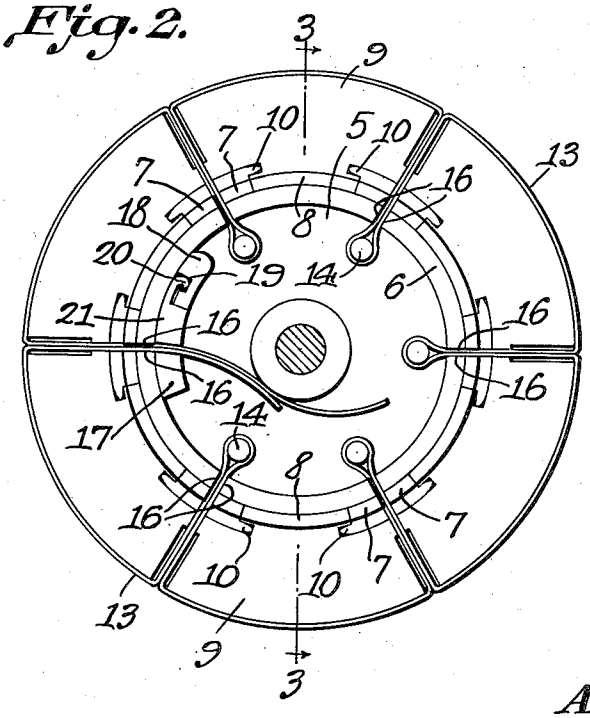
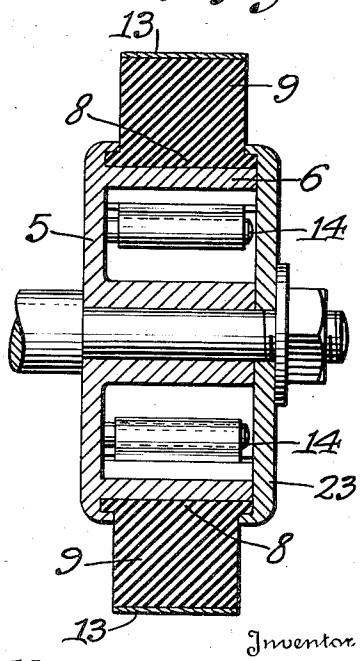


Fig. 3.



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Fig. 4.

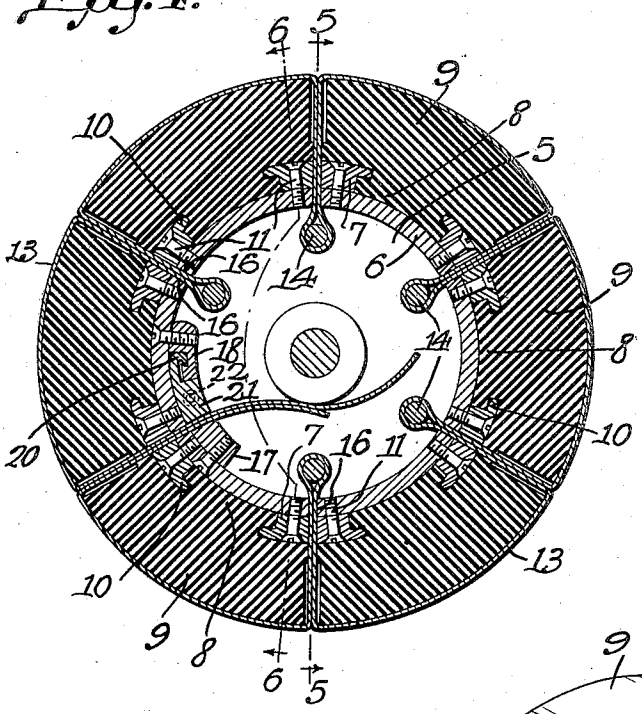


Fig. 5.

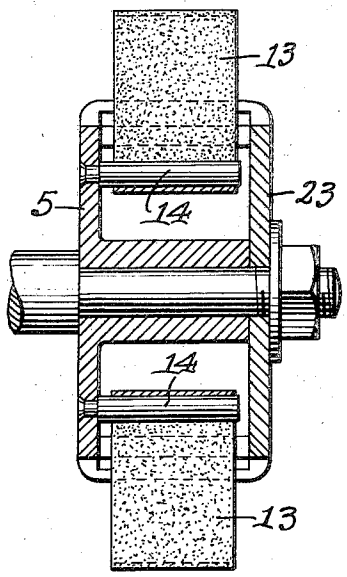
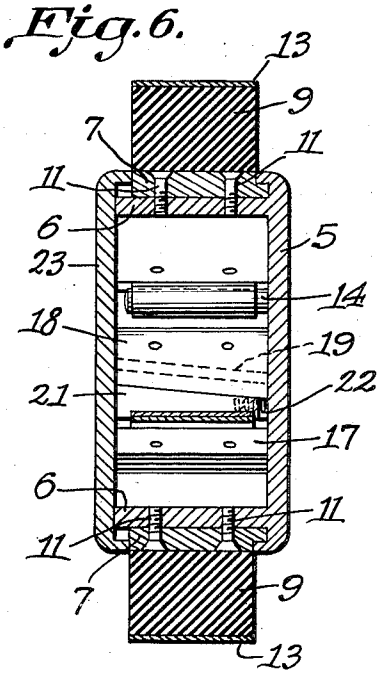


Fig. 6.



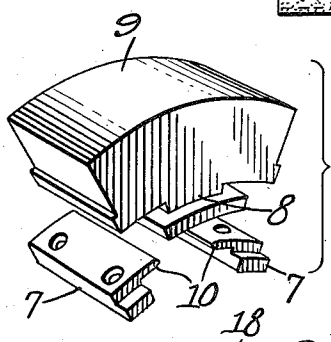


Fig. 7.

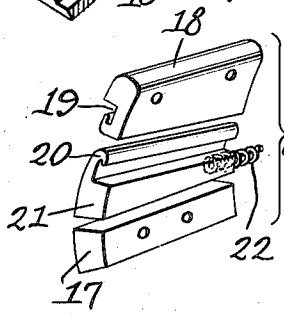


Fig. 8.

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Patented June 14, 1938 2,120,624

UNITED STATES PATENT OFFICE

2,120,624

SANDING WHEEL HEAD

Arthur L. Pearson, High Point, N. C.

Application April 7, 1937, Serial No. 135,561

6 Claims. (Cl. 51—194)

This invention relates to abrasive wheels or sanding wheels, the primary object of the invention being to provide a wheel of this character wherein the sand cloth may be readily and easily secured thereto, in such a way that the cloth may be adjusted with respect to the resilient rim of the wheel, to change the position of the sand cloth to the end that the entire surface of the sand cloth may be presented for use.

Another object of the invention is to provide means for securing the ends of the sand cloth in position, after the sand cloth has been properly adjusted on the wheel.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein described, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawings:

Figure 1 is a side elevational view of a sand wheel constructed in accordance with the invention.

Figure 2 is a side elevational view of the sand wheel, one of the discs having been removed.

Figure 3 is a sectional view taken on line 3—3 of Figure 2.

Figure 4 is a sectional view through the wheel, taken at right angles to Figure 3.

Figure 5 is a sectional view taken on line 5—5 of Figure 4.

Figure 6 is a sectional view taken on line 6—6 of Figure 4.

Figure 7 is a perspective view illustrating one of the sections of the resilient rim, forming a part of the wheel.

Figure 8 is a perspective view illustrating the sand cloth securing means.

Referring to the drawings in detail, the sanding wheel includes a hollow main section 5 formed with a circumferential flange 6 extending beyond the periphery of the main section. Spaced transversely disposed bars 7 are secured to the periphery of the main section, by means of screws 11, providing spaces or grooves for the reception of the extensions 8 formed on the rim sections 9, which are constructed of blocks of rubber. The extensions 8 are formed with grooves extending along the sides thereof, for the reception of the tongues 10 which are formed on the bars 7 and extend beyond the side edges thereof.

As clearly shown by Figure 4 of the drawings, the resilient rim sections 9 have their adjacent ends spaced apart so that the sand cloth, may pass therebetween, the sand cloth, in the present showing, being indicated by the reference character 13. Pins 14 are secured within the main section 5, and are disposed adjacent to slots 16 formed in the main section, the pins and slots being arranged adjacent to the spaces between the ends of the adjacent rim sections. In the positioning of the sand cloth, the cloth is passed over the pins 14, and extended over the outer curved surfaces of the resilient rim section, the free ends of the sand cloth passing into the main section 5. The sand cloth clamping member includes a bar indicated by the reference character 17, which is secured within the main section 5, at a point adjacent to one of the slots of the main section, the surface of the bar 17 adjacent to the slots, being slightly beveled, presenting a gripping surface.

Adjacent to the bar 17, is a bar 18, which is formed with an inclined groove 19 for the reception of the rib 20 of the movable clamping bar 21. A coiled spring indicated by the reference character 22 extends from one end of the bar 21, of the clamping member and operates to normally urge the movable clamping bar 21, to its inactive position.

After the sand cloth has been positioned, in a manner as described, the movable clamping member is moved into engagement with the sand cloth, and the removable disc 23 is positioned on the main section 5, the removable disc contacting with one end of the movable clamping bar 21, with the result that when the removable disc has been properly positioned, the movable clamping bar 21 will be moved into clamping relation with the bar 17, securely holding the sand cloth against movement.

When the sand cloth becomes worn, and it is desired to present a new surface to the work, it is only necessary to remove the sanding cloth and position it in such a way that the parts thereof which have been exposed to wear, are disposed between the ends of the adjacent resilient rim sections, that portion of the sand cloth which was previously held between the adjacent resilient rim sections being now exposed to wear.

In this way the entire length of sand cloth may be used, eliminating waste.

Having thus described the invention what is claimed is:

1. A sanding wheel comprising a main section, removable resilient rim sections mounted on the

main section rigid horizontally disposed, pins mounted within the main section, a length of sand cloth positioned over the pins and extending between the adjacent ends of the rim sections, and means for securing the ends of the sand cloth.

2. A sanding wheel comprising a main section, a rim embodying a plurality of removable resilient sections, means for securing the resilient sections to the main section, the adjacent ends of the rim sections being spaced, said main section having slots registering with the spaces between the rim sections, a length of sand cloth positioned over the rim sections and extending between the rim sections, clamping members on the main section adapted to clamp the ends of the sand cloth to the main section, and a removable disc mounted on the main section and engaging the rim sections, securing the rim sections against lateral displacement.

3. A sand wheel comprising a main section having grooves formed in the periphery thereof, a rim including a plurality of independent yieldable sections, extensions on the yieldable sections and adapted to fit within the grooves of the main section securing the rim sections in position on the main section, a removable disc secured at one side of the main section and engaging the removable sections securing the removable sections in position on the main section.

4. A sand wheel comprising a main section, a rim section including a plurality of yieldable sections removably secured to the periphery of the main section, the periphery of the main section having slots, the adjacent ends of the yieldable sections being spaced apart, the spaces between adjacent yieldable sections registering with the slots, pins disposed within the main section and arranged opposite to the slots, a length of sand cloth having portions thereof extended between adjacent yieldable sections and looped around the pins, and means for securing the ends of the sand strip to the main section.

5. A sand wheel comprising a hollow main section, a rim including a plurality of independent yieldable sections, removably mounted on the main section, pins mounted within the main section and disposed transversely with respect to the periphery thereof, said main section having slots, a length of sand cloth positioned on the periphery of the rim section, portions of the sand cloth extending through the slots and held between the sections of the rim and looped over the pins, and clamping means for securing the ends of the sand strip.

6. A sand wheel comprising a hollow main section, pins within the main section and extending from one wall thereof, said main section having slots, a rim section including a plurality of removable sections held in spaced relation at their ends, a length of sand cloth positioned on the periphery of the rim section, portions of the sand cloth extending through the spaces between the removable sections, and looped around the pin, a clamping member clamping the ends of the sand cloth together, and a removable disc closing one side of the main section and adapted to hold the clamping member in clamping relation with the sand cloth.

ARTHUR L. PEARSON.