(No Model.)

F. P. PFLEGHAR.

APPARATUS FOR CLAMPING PERIPHERAL BANDS ON WHEELS.

No. 523,729. Patented July 31, 1894.

Fig. 1

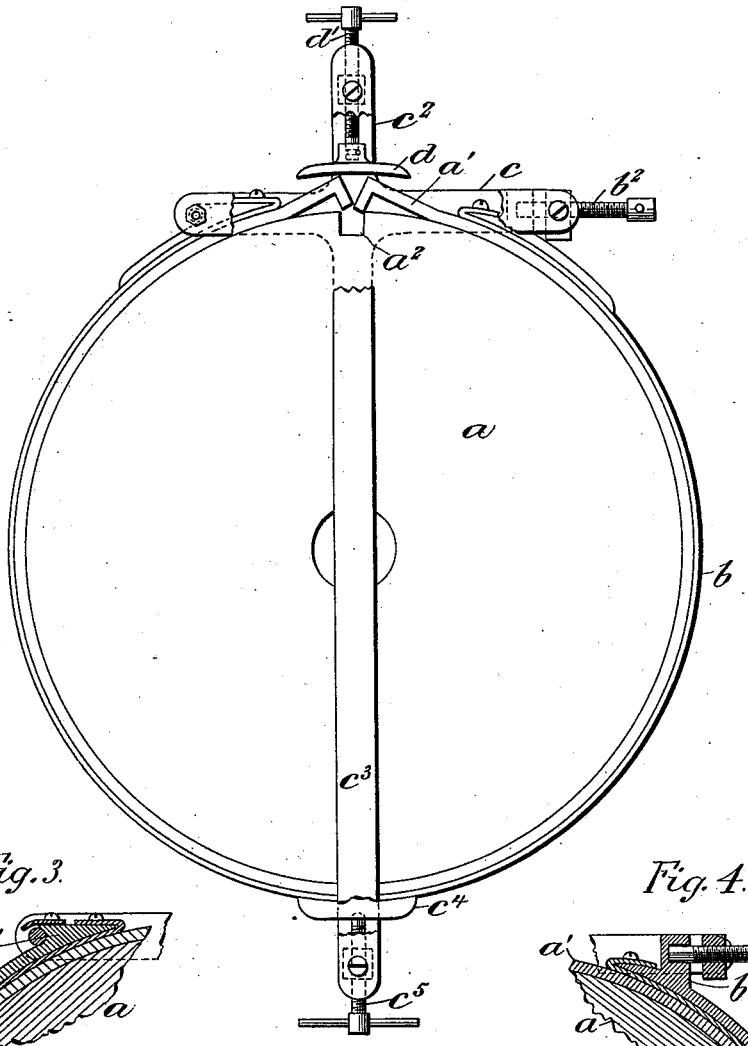


Fig. 3.

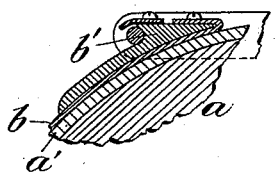


Fig. 4.

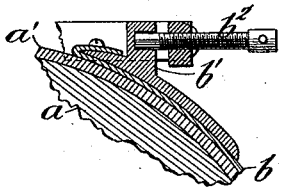
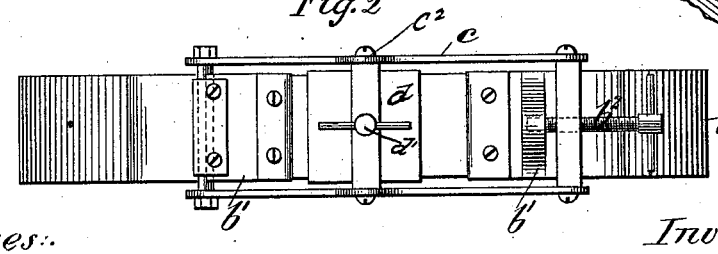


Fig. 2



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UNITED STATES PATENT OFFICE.

FRANK P. PFLEGHAR, OF NEW HAVEN, CONNECTICUT.

APPARATUS FOR CLAMPING PERIPHERAL BANDS ON WHEELS.

SPECIFICATION forming part of Letters Patent No. 523,729, dated July 31, 1894.

Application filed March 11, 1893. Serial No. 465,541. (No model.)

To all whom it may concern:

Be it known that I, FRANK P. PFLEGHAR, a citizen of the United States, and a resident of the city and county of New Haven, State of Connecticut, have invented a new and useful Apparatus for Clamping and Securing in Position Peripheral Bands on Polishing or other Wheels, of which the following description, taken in connection with the drawings herewith accompanying, is a specification.

My invention has for its object to provide a cheap and simple device or means for stretching and clamping the peripheral bands of polishing wheels upon the supporting wheel or disk and securing the ends of the same.

The invention consists in the construction and combination of the parts forming such device as will hereinafter be set forth in detail and pointed out the claims.

Referring to the drawings:—Figure 1, represents my new device in position upon a polishing wheel, showing the ends of the band brought into position to be forced into the opening in the disk. Fig. 2, represents a plan view of the same. Figs. 3 and 4 represent vertical sectional views through the opposite ends of the clamping band and the ends of their connecting frame or device, to more clearly show the construction of the same.

To explain in detail,—a represents a polishing wheel, and a' its peripheral band. The said disk being provided in the instance shown, with an opening or groove a^2 in its periphery into which the ends of the band a' are adapted to be extended and secured in a manner as set forth in my said pending application above referred to.

The device forming my present invention, for securing the band a' on its supporting disk or wheel, consists of a flexible band b, preferably formed of metal, which is adapted to embrace the periphery of the disk as more clearly shown in Fig. 1, and is provided with a raised shoulder or projection b' at each end thereon, forming a bearing surface for the connection or engagement therewith of a frame c which latter engages at one end with one of the shoulders b' as more clearly shown in Figs. 2 and 3, and at its opposite end is provided with an adjusting screw b^2 supported therein, which is adapted to engage with the shoulder on the opposite end of the band b, (as clearly shown in Figs. 1, 2 and 4) in such manner that the operator by turning said screw may cause the ends of the band b to draw toward each other and thus stretch the peripheral band a' upon the disk or wheel a and force the ends of the same toward each other and in position to be forced into the opening or groove a^2 in the disk adapted to receive the same. When the ends of the peripheral band are thus brought together and held in a position to be inserted into the opening a' in the disk, as shown in Fig. 1, they are adapted to be forced into the latter by means of a vertically movable plate d which is supported on the end of an adjusting screw d' by which it is operated to be lowered or moved downward to engage with the band a' and force the turned-in ends of the same into the opening or groove in the disk or wheel a in which they are held. The adjusting screw d' is supported and operates in a part c' of an extension c^2 of the frame c as shown in Figs. 1 and 2. The frame c is provided with another extension c^3 upon the side opposite that of the part c^2 and in line therewith, which is also provided with an adjustable plate or block c^4 supported and operated by an adjusting screw c^5, which said plate or block is adapted to engage with the lower or opposite edge of the wheel to form a bearing against which the opposite compressing plate d may act or draw when being operated to force the ends of the band a' into their said receiving opening a^2 in the disk or wheel a. The plate or block c^4 being thus adjustable also allows the device to be properly adjusted to wheels or disks of different sizes as will be readily understood.

Having thus set forth my invention, it will be obvious that various changes may be made in the construction and arrangement of the several parts of the device without departing from the spirit of my invention. For instance, cam levers might be used in lieu of the adjusting screws shown, for operating the several connecting or engaging parts, or the man-

ner of connecting and supporting the several parts in their relation to each other be varied; but

What I do claim, and desire to secure by Letters Patent of the United States, is—

1. An apparatus for clamping and securing in position the peripheral band on polishing or other wheels, consisting of a flexible band, and the frame or device *c* for engaging or connecting the ends of said band, provided with means for drawing together or moving the same in their relation to each other, substantially as described and for the purpose set forth.

2. An apparatus consisting of a flexible band, a frame for connecting the ends of said band, provided with means for moving the same in their relation to each other, and a movable plate with means for operating the same, substantially as described and for the purpose set forth.

3. An apparatus consisting of a flexible clamping band, and a frame provided with means for connecting the ends of said band, a movable clamping plate, and a bearing surface for contact with the polishing wheel or other body against which the said clamping plate may draw when operated, substantially as described and for the purpose set forth.

4. An apparatus consisting of a flexible band, a frame provided with means for connecting the ends of said band, a movable clamping plate, and an adjustable bearing plate or surface, arranged and operating in their relation to each other in a manner substantially as described and for the purpose set forth.

5. An apparatus consisting of a flexible band provided with raised shoulders or bearing surfaces at its opposite ends, and a frame or device forming a connection between said shoulders or bearing surfaces provided with an adjusting-screw for moving the ends of the band in their relation to each other, substantially as described and for the purpose set forth.

FRANK P. PFLEGHAR.

In presence of—
SIEGWART SPIER,
DANIEL COLWELL.