

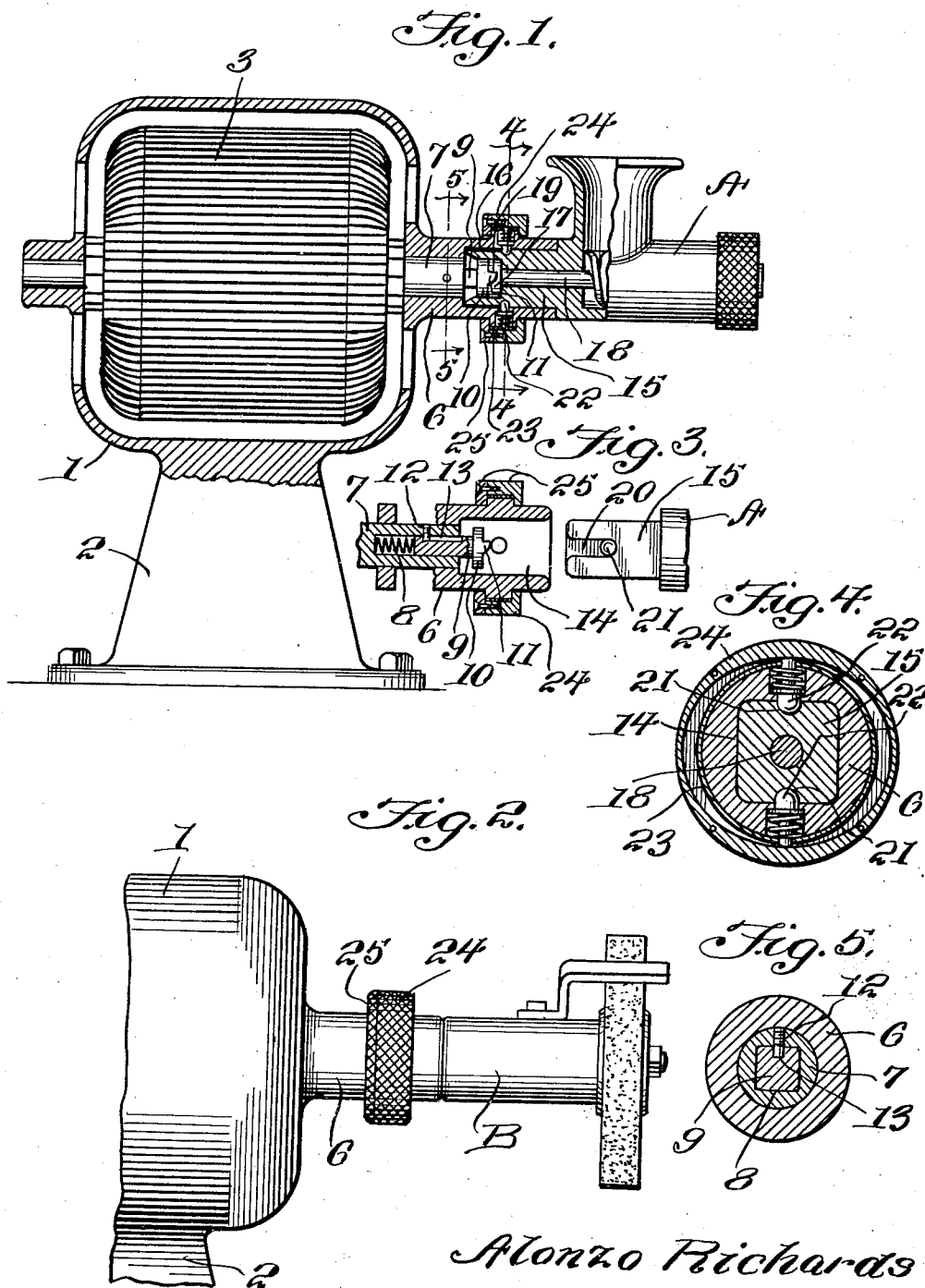
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MEANS FOR CONNECTING AN IMPLEMENT TO A MOTOR

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MEANS FOR CONNECTING AN IMPLEMENT TO A MOTOR

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This invention relates to means for interchangeably connecting a meat chopper and a sharpening tool to an electric motor so that either device can be driven from the motor, as desired.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawing and specifically pointed out in the appended claim.

In describing the invention in detail, reference will be had to the accompanying drawing wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a sectional view showing a meat chopper driven by the motor.

Figure 2 is an elevation showing a grinding tool attached to the motor.

Figure 3 is a sectional detail view of the connecting means, with the parts separated.

Figure 4 is a section on line 4—4 of Figure 1.

Figure 5 is a section on line 5—5 of Figure 1.

In these views, the numeral 1 indicates the casing of the electric motor which is attached to the base 2, and 3 indicates the motor. A bearing part 6 is attached to one end of the casing and the motor shaft 7 extends into this part. This shaft is formed with a bore 8 at its outer end which receives a plunger member 9 having a head 10 thereon formed with a projection 11. I prefer to make the bore and the stem of the plunger member of square shape in cross section, as shown in Figure 5, so that the plunger member will rotate with the shaft and the plunger member is slidably arranged in the bore through means of the pin 12 in the shaft engaging a groove 13 in the plunger member. The outer end of the shaft is flush with the inner wall of a socket 14 formed in the outer end of the part 6, this socket being of square shape in cross section. The inner end of the body of the chopper A, as well as the inner end of the body of the grinding tool B, is shaped to engage the socket 14, as shown at 15, and the extremity of this reduced part 15 is

formed with a socket 16 to receive the head of the plunger 11 and the head 17 of the shaft 18 of the chopper or tool. The head 17 is formed with a groove 19 to receive the projection 11 of the head 10 of the plunger so as to lock the plunger to the head of the shaft and thus cause the shaft to be rotated by the motor when the parts are in operative position. A number of grooves 20, having recesses 21 at their inner ends, are arranged in each reduced part 15, and plungers 22 are arranged in openings in the bearing part 6 for engaging the recesses 21 to hold the chopper or grinding tool in said part 6, it being understood that the plungers will pass through the grooves 20 when the reduced part 15 is pushed into the socket 14 and then the plungers will enter the recesses and lock the parts together. The plungers are held in place by the ring 23 which surrounds a portion of the bearing part 6, this part 6 being provided with an annular enlargement in which the holes or openings for the plungers 22 are formed. A cam ring 24, having a cam-shaped interior circumference is rotatably arranged on the enlargement and is held in place thereon by a collar 25 which is suitably fastened to the ring 24. Thus in one position of the cam ring, the plungers 22 will be pressed inwardly so as to engage the recesses 21, and in another position of the cam ring, the springs of the plungers 22 can force them outwardly so that they will release the part 15 and permit the same to be withdrawn from the socket 14.

From the foregoing it will be seen that I have provided means whereby either a meat chopper, such as shown at A, or a grinding tool such as shown at B, can be attached to the motor in such a manner that the shaft thereof will be rotated by the motor.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claim.

What I claim is:—

A two-part bearing for a pair of clutch connected shaft sections, one part of said bearing having a non-circular socket in which one part of the clutch is received, the other part of said bearing having a reduced portion positioned in said socket and of similar cross sectional contour, a socket projecting from the reduced portion of the second mentioned part of the bearing and forming a continuity thereof, and adapted to receive the other cooperating clutch member, the respective sockets of said parts of the bearing being arranged in interfitting end to end contacting engagement, said second mentioned part of the bearing having opposed depressions, spring pressed plungers mounted on the first mentioned part of the bearing and adapted to be received by the depressions for holding the respective parts of the bearing together, a ring rotatably mounted on the first mentioned part of the bearing and having spaced cam surfaces for operating said plungers.

In testimony whereof I affix my signature.
ALONZO RICHARDS.

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