

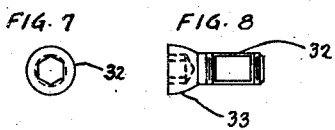
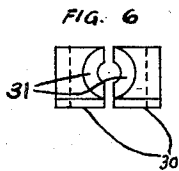
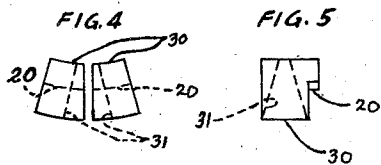
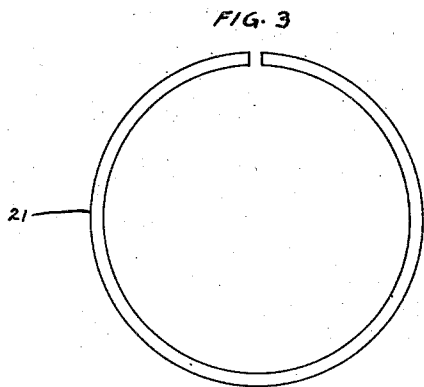
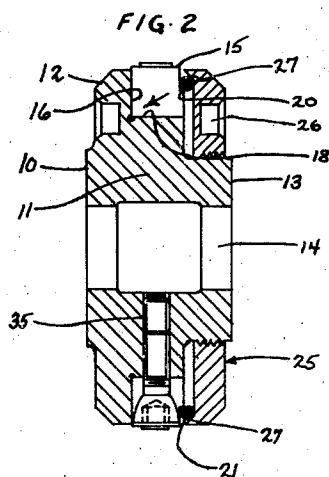
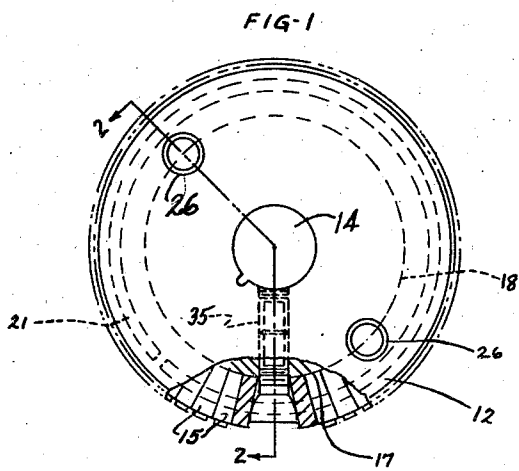
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ROLL TYPE DIE HOLDER

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ROLL TYPE DIE HOLDER

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3 Claims. (Cl. 101—377)

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This invention relates to type die holders and more particularly to a device of the roll type.

An object of this invention is to provide a roll type die holder of an improved and simplified construction and wherein the die members are very securely and effectively held and maintained in proper relation to one another without the danger of the same becoming loose in the holder.

A further aim of the invention is to provide a roll type die holder having the above advantages and in which the die holder may be readily assembled and removed when desired.

Other objects will be in part obvious and in part pointed out more in detail hereinafter.

The invention accordingly consists in the features of construction, combination of elements and arrangement of parts which will be exemplified in the construction hereafter set forth and the scope of the application of which will be indicated in the appended claims.

In the accompanying drawing:

Figure 1 is a side view of the die holder with a portion thereof shown in cross section;

Fig. 2 is a longitudinal sectional view taken along lines 2—2 of Fig. 1;

Fig. 3 is a view of the split wire ring;

Figs. 4, 5 and 6, are respectively, side, end, and top plan views of the wedge blocks;

Fig. 7 is a top view of the wedging screw; and

Fig. 8 is a side view of the wedging screw.

Generally, the device, as shown in the illustrations, consists of a body member having a peripheral flange on one side and a threaded central boss on the other. On this boss is threaded a clamping plate along the periphery of which is a bevelled surface adapted to engage a split wire ring. The die members rest against the flange of the body member and against the periphery of the body portion and are stepped to accommodate the split wire ring. When the clamping plate is tightened, the bevelled surface presses against the wire ring in such a direction as to force said die members against both the periphery of the body member and the flange.

More particularly, the present structure consists of a body member 10, as shown in Fig. 2. This body member has a circular body portion 11, a peripheral flange 12 on one end thereof, and a threaded central boss 13 on the other end. Body member 10 also has suitable means for securing it to a shaft, such as a central bore 14, grooved to accommodate a spline.

The numeral 15 designates blocks, some of which may be die members having on their outer ends suitable raised indicia or type and others

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of which may be in the nature of spacing blocks, these blocks in the present instance being collectively referred to as type die blocks for convenience of terminology. Die blocks 15 engage on one side against the surface 16 of flange 12, and the inner curved ends 17 of the die members engage against the periphery 18 of circular body portion 11. The die blocks 15 are stepped, as at 20, for accommodating a split wire ring 21, shown in Fig. 2. Constructed to screw onto threaded central boss 13 is a clamping plate 25 which may contain spanner openings 26 for accommodating a spanner wrench. On the outer periphery of clamping plate 25 is a bevelled surface 27 adapted to engage wire ring 21, so that when clamping plate 25 is tightened upon central boss 13, the pressure of bevelled surface 27 against wire ring 21 and thence against steps 20 of die blocks 15 will be directed as shown by the arrow in Fig. 2, thus holding the dies against radial movement and exerting components of force in a diametric as well as an axial direction relative to the body member.

In order to circumferentially crowd die blocks 15 against one another, there are provided wedge blocks 30, shown in Figs. 4, 5 and 6. The wedge blocks 30 are stepped in line with the blocks 15 and the opposing faces of the wedge blocks contain tapered grooves 31 for accommodating the tapered head 33 of screw 32, as shown in Fig. 8. Turning the screw 32 into threaded hole 35 in the circular body portion 11 forces wedge blocks 30 apart and thus circumferentially crowds the die blocks against one another.

As many changes could be made in the above construction and many apparently widely different embodiments of this invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the language used in the following claims is intended to cover all of the generic and specific features of the invention herein described and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

We claim as our invention:

1. In a roll type die holder, a roll comprising two generally circular members forming a circumferential channel for type die blocks, said members being threadably joined together for axial movement relative to one another, one of said members having an internal truncated con-

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cal cam surface, type die blocks in said channel having shoulders opposed to said cam surface, and a contractable ring between said shoulders and said cam surface.

2. In a roll type holder, a roll comprising two generally circular members forming a circumferential channel for type die blocks, said members being threadably joined together for axial movement relative to one another, one of said members having an internal truncated conical cam surface, type die blocks in said channel having shoulders opposed to said cam surface, a contractable ring between said shoulders and said cam surface, and wedges in said channel having shoulders coinciding with the shoulders on said type die blocks, said wedges having between the opposed faces thereof a tapered screw thread-

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ably connected to one of said members for circumferentially expanding said wedges apart from one another.

3. In a roll type die holder, a roll comprising a circular body member having a radial flange and a threaded boss, a clamping plate threaded on said boss for axial movement relative to said flange and having a peripheral flange with an inclined internal cam surface, type die blocks between said first-mentioned radial flange and said clamping plate engaging said circular body member and having shoulders opposed to said cam surface, and a contractable ring between said shoulders and said cam surface.

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