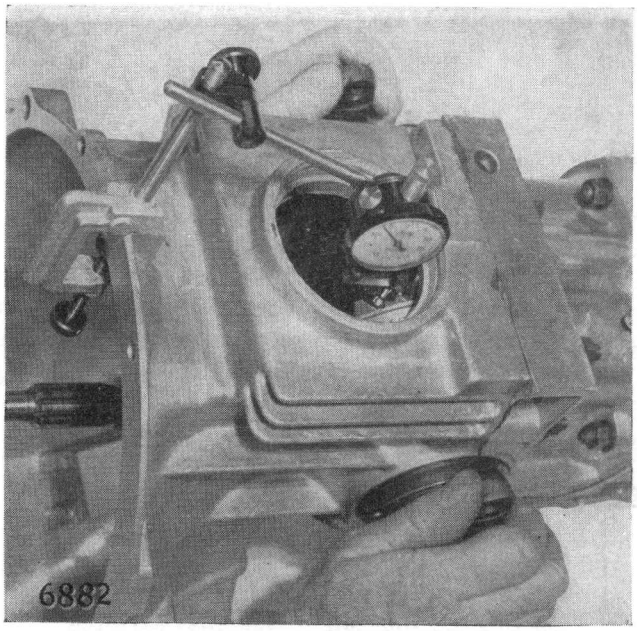

Fig. 44. *Set up clock gauge for backlash*

This can be achieved by locking the reverse driven gear with the reverse idler gear against a casing stud.

Adjust to within ·0035 in.-·0055 in. (·089-·140 mm) of backlash by screwing each of the inner screwed sleeves exactly the same amount in the required direction.

If excessive backlash, screw cage side inner screwed sleeve out and gear side inner screwed sleeve in, exactly the same amount.

If insufficient backlash, screw gear side inner screwed sleeve out, and cage side inner screwed sleeve in exactly the same amount.

When correctly adjusted, the angles between the two previously marked slots on each side should be the same.

Backlash must be measured on at least four positions on the crown wheel.

As a final check of pinion and crown wheel positions, the teeth of the crown wheel should be painted with marking paste and the crown wheel rotated to obtain an impression of the pinion teeth.

Maximum run out on crown wheel ·001 in. (·025 mm) measured with a clock gauge.

If correct, the markings on the crown wheel should be as shown in Fig. 47. Backlash as given should be measured at room temperature. If measured hot, backlash should be ·005 in.-·007 in. (·127-·178 mm).

Press a new oil seal (8/27) into the inner screwed sleeve (10/25) using the special stepped mandrel (Tool No. RG366A) as shown in Fig. 45.

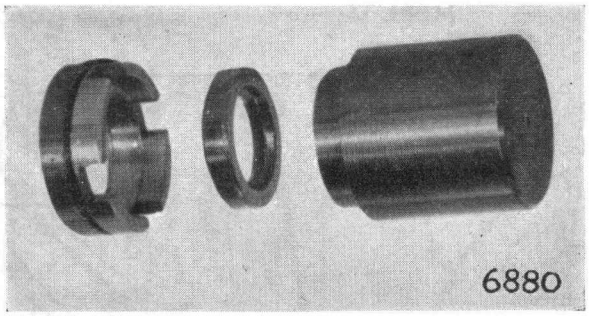

Fig. 45. *Tool for fitting hypoid oil seals*

Fit the spring rings to the screwed sleeves.

Fit the drive flanges.

Tighten the nuts to the figure given in General Data and peen the collar of the nuts into the slots in the shafts, using a blunt chisel shaped punch. (See Fig. 46.)

The nut must be supported to prevent damage to the bearings.

Units assembled without drive shaft circlips must have the flanges tied together to prevent them falling out until fitted to the car.

Fig. 46. *Peening drive flange nuts*