

APPENDIX XII.

SHOCK ABSORBERS.

The Rolls-Royce Shock Sbsorber effectually damps the violent oscillations of the road springs, and although the main features are of the orthodox pattern, some methods of construction are employed which make the apparatus far more durable than other shock absorbers of this type hitherto manufactured.

The Shock Absorber consists of s base (A)-see Figs. 74 and 75 on pp. 102 and 103 - and a washer (B), which are keyed together. Between these parts a steel lever (C) is free to move. The steel lever (C) is kept out of contact with the metal portions (A) and (B) by means of two leather washers (D) and (E). The leather washers keep the damping effort exerted constant.

The pieces (A) and (B) are drawn together by means of a suitable spring (F) and (G). Thus the action of the spring and bolt, in connection with the base and washer (B), is to exert a pressure on the steel lever (C). The use of a spring to draw the portions together has several advantages ; among them it should be noted that the Shock Absorber

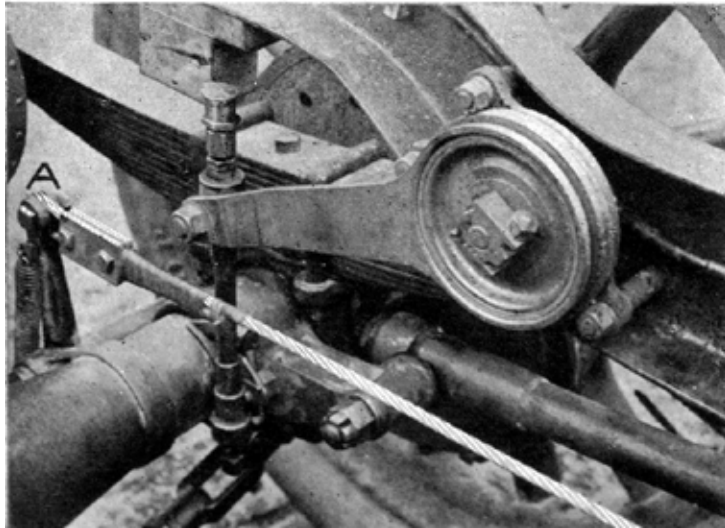


Fig. 73

REAR SHOCK ABSORBER IN POSITION ON FRAME.

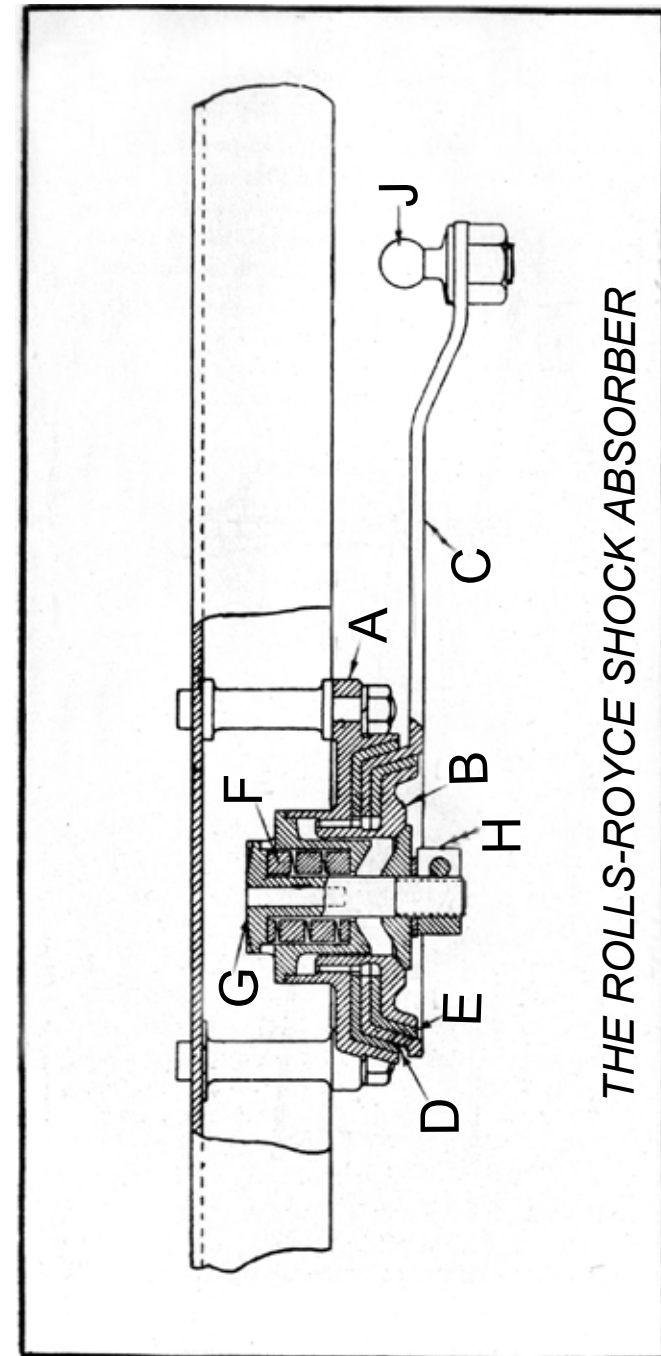


Fig. .74

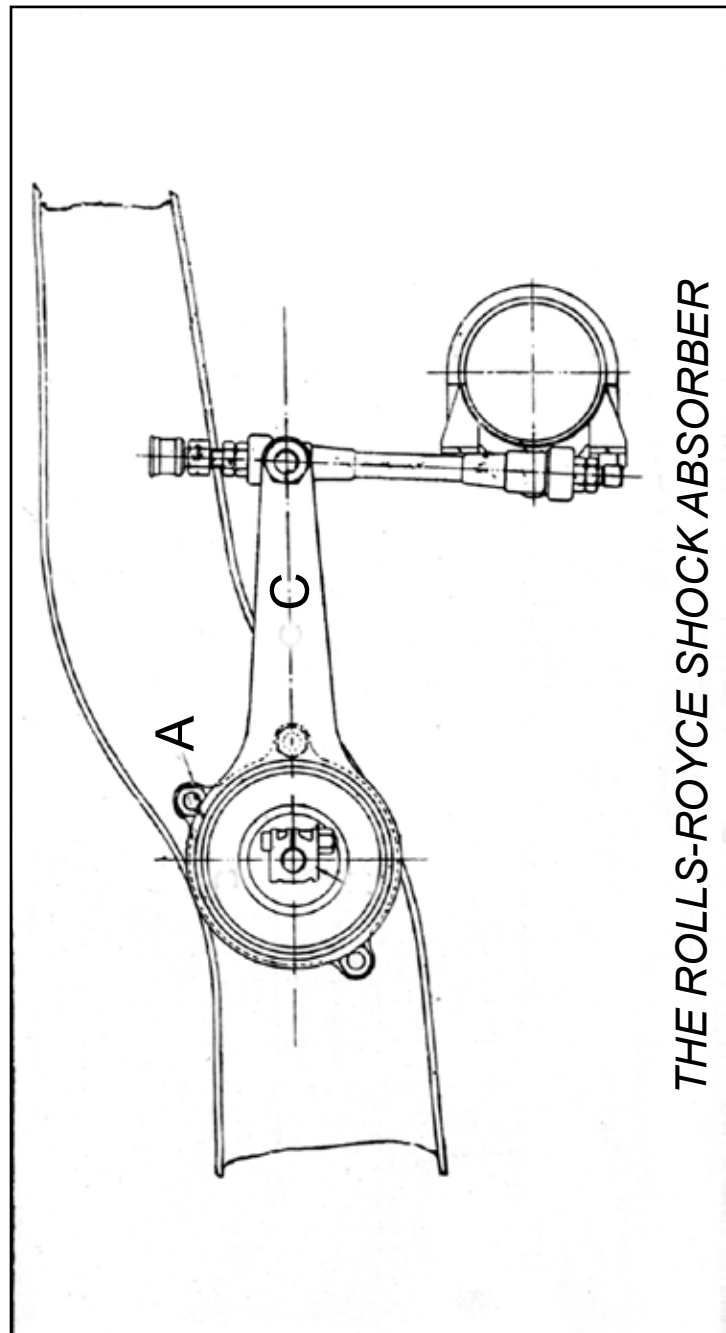


Fig. 75

may wear a considerable time before making any appreciable difference to the length, and, therefore, the force exerted by the spring.

The spring should be adjusted by means of the nut (H) fixed on one end, so that a load of 20 lb. may be hung on the end of the lever C, without slip. The adjusting nut which is split for locking purposes, is so shaped that it will take a standard spanner across its flats.

The Shock Absorber lever "C" is connected to the axle by means of an adjustable ball joint "J". By means of this joint it is possible to take up all the slack in the connection, and thus render the Shock Absorber noiseless in action.

These ball joints should be adjusted in a similar manner to the radius rod ends as described on page 54.

