The following hints will also assist in prolonging the life of the tyres :

Clean oil and grease from the tyres with petrol as soon as possible.

Ensure correct alignment of the wheels.

Cross tramlines at as near a right-angle as possible. They are dangerous, particularly in wet weather and may damage the tread.

Fierce braking and acceleration quickly wear away the tread. Apply brakes gently to avoid skidding, and when starting from rest, accelerate steadily on a small throttle opening.

TYRE REMOVAL. Remove valve cap and rim nut and deflate tyre by unscrewing the inner valve. A small key for unscrewing the valve is provided on top of the valve cap. Push outer-cover right into wheel rim well opposite valve, and insert tyre lever under cover as near the valve as possible. If the opposite side is properly in the well the edge of the cover should come over the rim without using force.

Work until the cover is off one side of the rim, then remove inner-tube by pushing valve up through hole and gently easing out. If it is desired to take the tyre right off, proceed in the same way — pushing into well, inserting lever in other side and working off.

TYRE REPLACEMENT. It is seldom necessary to remove the outer-cover completely with normal punctures, but if the tyre has been taken off proceed as follows : Work one side of tyre over rim, insert inner-tube and pump up sufficiently to remove any kinks ; place valve in hole and screw the securing nut about ½" up the valve shaft. The white spot on the side of outer-cover should be positioned over valve.

Move free edge of cover over rim opposite valve and work round rim, ensuring that inner tube is not pinched, equally on either side of valve until a few inches remain free. The valve should be in the centre of this free length and no difficulty should be experienced in getting it over the edge of rim providing the rest of the cover is right down in the well.

Once tyre is home, inflate to about half pressure and manipulate cover until tread runs evenly ; when rotation of the wheel has shown this to be so, inflate to correct pressure. Do not forget to replace the valve cap. This keeps the petrol or dirt out.

When fitting new tyres it is a good plan to smear a little soft soap or petrol around the rim to ease the cover on.

Chains

A chain is an assembly of links with rollers connected together by outer link plates and held together by rivets. If it is kept clean, adequately lubricated and correctly adjusted a chain will give little trouble and will wear out long before breaking point is reached. The front chain is fully enclosed in an oil bath and consequently wear will be negligible over a long period. The rear chain, being exposed and more heavily loaded is more likely to give trouble through neglect and should be regularly checked for tension and frequently lubricated.

REAR CHAIN ROLLER. Fitted just behind the rear brake pedal to prevent chain rattle. Does not affect rear chain adjustment.

ADJUSTING THE REAR CHAIN. Correct rear chain adjustment is particularly important on motor cycles with pivoted fork rear suspension as movement of the rear wheel causes variations in the sprocket centres with resultant changes in chain tension.

The rear chain should be adjusted after the first 200 miles and subsequently every 1,000 miles. Adjustment is obtained by moving the rear wheel forwards or backwards in the slotted fork ends which are fitted with adjusting bolts and locknuts to enable the wheel spindle to be set in the desired position. Since the rear chain tightens under load, correct chain adjustment must be maintained if the maximum useful life is to be obtained from the chain, sprockets and bearings.

To check and adjust rear chain tension, proceed as follows :

1. Raise the unladen machine on the stand and measure the amount of up and down movement on the bottom run of the chain midway between sprocket centres. The rear chain should have ¾" to 1" movement in this static position.
2. Retract the stand and sit on the machine. If there is no-one to help you, feel the bottom run of the chain by reaching down with the left hand. Chain whip should now be reduced to between ⅜" and ½" up and down movement. Check again in different positions by rolling the machine a little at a time. This is because chains seldom wear evenly and there is generally one spot tighter than the rest. Measurement should be taken at the tightest point.
3. If chain whip is greater or smaller, slacken the rear spindle nuts and turn both adjusters until the correct chain tension is obtained. Tighten locknuts and spindle nuts and check again with the wheel in different positions. Always turn the adjusters an equal number of turns to ensure correct wheel adjustment.

REMOVING AND REFITTING REAR CHAIN. Obtain a piece of strong thin string about 10 feet long. Place the machine on the stand and turn the rear wheel until the connecting link is positioned near the rear sprocket and remove the connecting link. Pass the string through the hole of the end link on the top run and knot the two ends of the string together. Now pull the bottom run of the chain backwards with one hand while keeping the string taut with the other hand. As the end of the top run of the chain is disengaged from the gearbox sprocket, the string will lie one strand each side of the sprocket teeth. When the chain is well clear, cut one side of the string about 12" from where it is looped through the chain link.

The string should be left in position for refitting or replacing the chain. To refit, thread the longer end of the string through the hole in the end chain link and tie the two loose ends together. Then pull the string from the rear end at the same time guiding the chain to engage over the gearbox sprocket teeth. Keep on pulling until the chain encircles the rear wheel sprocket. Remove the string and refit the connecting link, making sure the closed end of the spring clip faces in the direction of rotation. To avoid the chain picking up any dirt or grit on the garage floor, it is advisable to lay some sheets of clean newspaper under the machine.

CLEANING AND LUBRICATING THE CHAIN. A chain cannot be cleaned merely by drenching with oil while in position on the machine.

The best way to do the job is as follows :

Remove spring clip and connecting link and take chain off the sprockets. Soak in a bath of paraffin using a stiff brush to remove all external dirt and allow paraffin to run through the joints of the chain. All grit and dirt between the joints must be removed. Swill in clean paraffin and hang over a pan to allow it to drain.

Immerse chain in tin containing graphited grease that has been heated until fluid over a pan of boiling water. Move the chain about in the grease until the grease has cooled off to normal semi-solid state. Remove chain from grease and wipe off surplus.

NOTE :—When replacing chain, see that the spring clip faces in direction of drive, i.e., closed end of link should face forwards on top run of chain.

SHORTENING REAR CHAIN. If chain has an even number of pitches, that is, a cranked link is not used in the chain, remove the rivets holding the second pair of outer link plates (see A) which will shorten the chain by four rollers and two pairs of outer link plates. Replace with cranked double link and single connecting link (B).