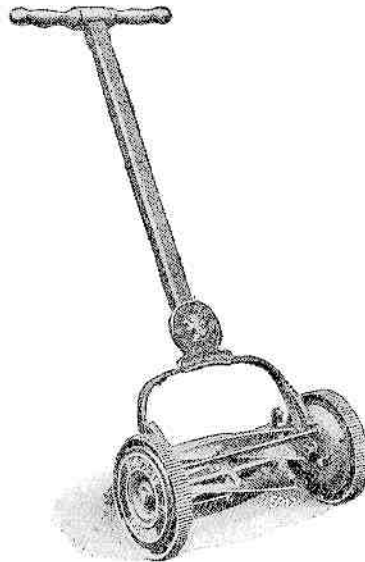
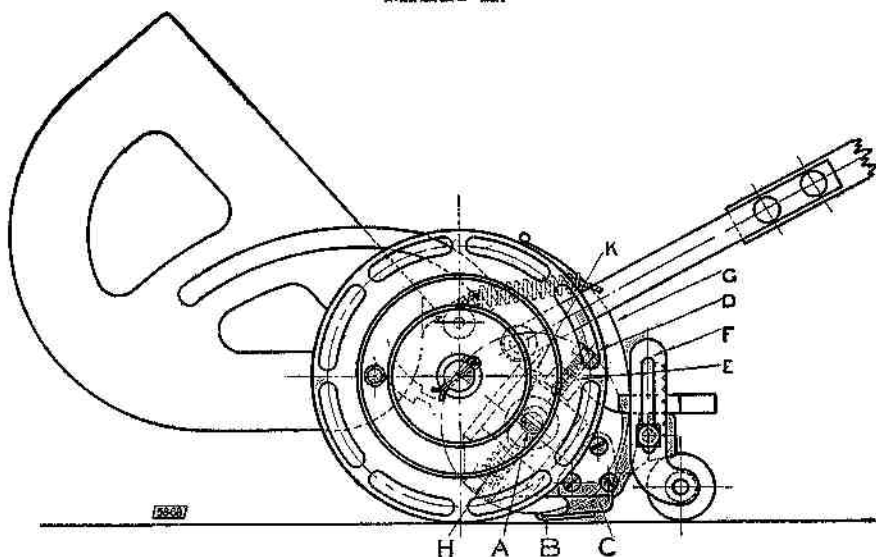


INSTRUCTIONS
FOR
Ransomes'
"Leo" Lawn Mower
MARK II.
WITH BALL BEARINGS.



Ransomes, Sims & Jefferies,
LIMITED,
ORWELL WORKS, IPSWICH.

INSTRUCTIONS FOR USING RANSOMES' "LEO" LAWN MOWER. MARK II.



1.—The lawn should be swept before using the machine, to remove stones, worm heaps and rubbish which *blunt and damage* the knives and prevent the machine from working properly.

2.—Oil the bearings with best machine oil every time before commencing cutting; wipe off any old or dried up oil, grass cuttings, etc., so as to let in the fresh oil, and put a little oil on the edges of knives and bottom blade. The mower will not work properly if bad, gummy oil is used. The ball bearings on cutting cylinder can be given a little oil occasionally through lubricators K.

3.—To alter the height of cut. As each machine is sent out with the knives set high for safety in transit, it may be necessary to adjust the machine before cutting the lawn. If the grass is long it will be better to use the machine as it is received, and afterwards set it lower for a second cut. To *cut closer* raise equally the supports F which carry the wood rollers.

CAUTION.—The machine should never be used with the bottom blade B pressing on the lawn. The spiral cutters are then liable to damage by the bottom blade being forced upwards, the machine works heavily, the turf will be torn up and the grass will not be properly cut. To see if the machine is set correctly, turn it on its side, and place a straight edge across the side wheels and the wood roller; the bottom blade should then be clear of the straight edge. When the grass box is used the knives should be set higher to allow for the weight of the box, the grass contained in it, and the front delivery plate.

4.—To collect the grass. Put on the box in the position shown in drawing, and place the concave G marked "front delivery plate" over the supports F, taking care that the bottom edge of the concave is behind the bottom block C and clear of the cutting cylinder.

Instructions—*continued.*

5.—When moving the machine to and from work and at all times when not cutting, turn the wood handle over to the other side so as to raise the knives from the ground and take them out of gear.

6.—A quick active step is best when working the machine.

7.—After using the machine it should always be well cleaned, the knives turned two or three times, to clear the cutting edges, and greased, and the machine stored in a dry place. If left wet and dirty it will soon get out of order. If the front delivery plate has been used it should be taken out and cleared from cuttings and dirt.

8.—Adjusting the knives. The machine is sent away with the cutting cylinder properly set to the bottom blade and no adjustment should be necessary for some time. When the machine does not cut perfectly, **set the cutting cylinder carefully to the bottom blade**, so that the revolving and fixed cutting edges are *kept together* without pressing too hard. **For setting the knives and bottom blade a simple and accurate method is used, viz. : one single set-screw D over the bearing A on each side of the machine.** When these screws are turned clockwise the knives are lowered, and when turned anti-clockwise the knives are raised. When properly set, the knives, *revolving freely*, should cut a leaf or piece of writing paper held between them quite easily at any part of the blades. If set *too tight* the machine will draw heavily.

CAUTION.—In the course of time, as the cutting cylinder and bottom blade become worn, the spring H may become closed up. If it is then attempted to set the cutting cylinder to the bottom blade, the **boss E is liable to be broken.** The spring should be shortened to allow for the necessary adjustment, if any further movement of the adjusting screw is possible.

It can be generally taken that when the cylinder adjusting screw is right home the cylinder requires re-blading.

9.—To sharpen the knives. Adjust the cutting cylinder so that the knives just touch the bottom blade B, take off the driving wheels, exchange the pinions (taking care the pawls do not drop out), and replace the wheels. Drop some oil and No. 1 emery powder over the edge of the bottom blade, also put some oil on the edges of the knives. Screw the grinding pin which is supplied with the machine into the right hand wheel. Hold the wood handle in the left hand, pressing it down until the driving wheels can turn freely, then turn the grinding pin rapidly backwards so that the motion of the cutting cylinder is reversed and put on more oil and emery as required until the edges are sharp. Do not let any emery get into the bearings or it will wear them away.

When the grinding is finished put the pinions back into their original positions, seeing that the pawls are in the correct way for driving.

10.—It is advisable occasionally to take off the wheels to clean the gearing, and to oil the pinions on the spindle.

11.—Cutting when the grass is very wet. If possible avoid this, as the machine does not cut so well. The wet grass is liable to get into the gearing, hang on the knives, and not be delivered properly into the box.

12.—In referring to the machine, the right and left hand should be given when standing at the handle.

In all cases machines sent for repairs must be forwarded carriage paid.

Ransomes, Sims & Jefferies, Ltd., Orwell Works, Ipswich.

NOTICE.

When this lawn mower needs a Works overhaul, arrangements can be made for the machine to be collected through the local ironmonger, who will arrange to send to our Repair Depot for attention. For the convenience of the users of our lawn mowers, such overhauls can be undertaken at our Works at Ipswich, at our Repair Depot at Greenwich, London, or at our Repair Depot in Edinburgh. Fuller particulars obtainable from the local ironmonger or Orwell Works, Ipswich.

RANSOMES, SIMS & JEFFERIES, LTD.