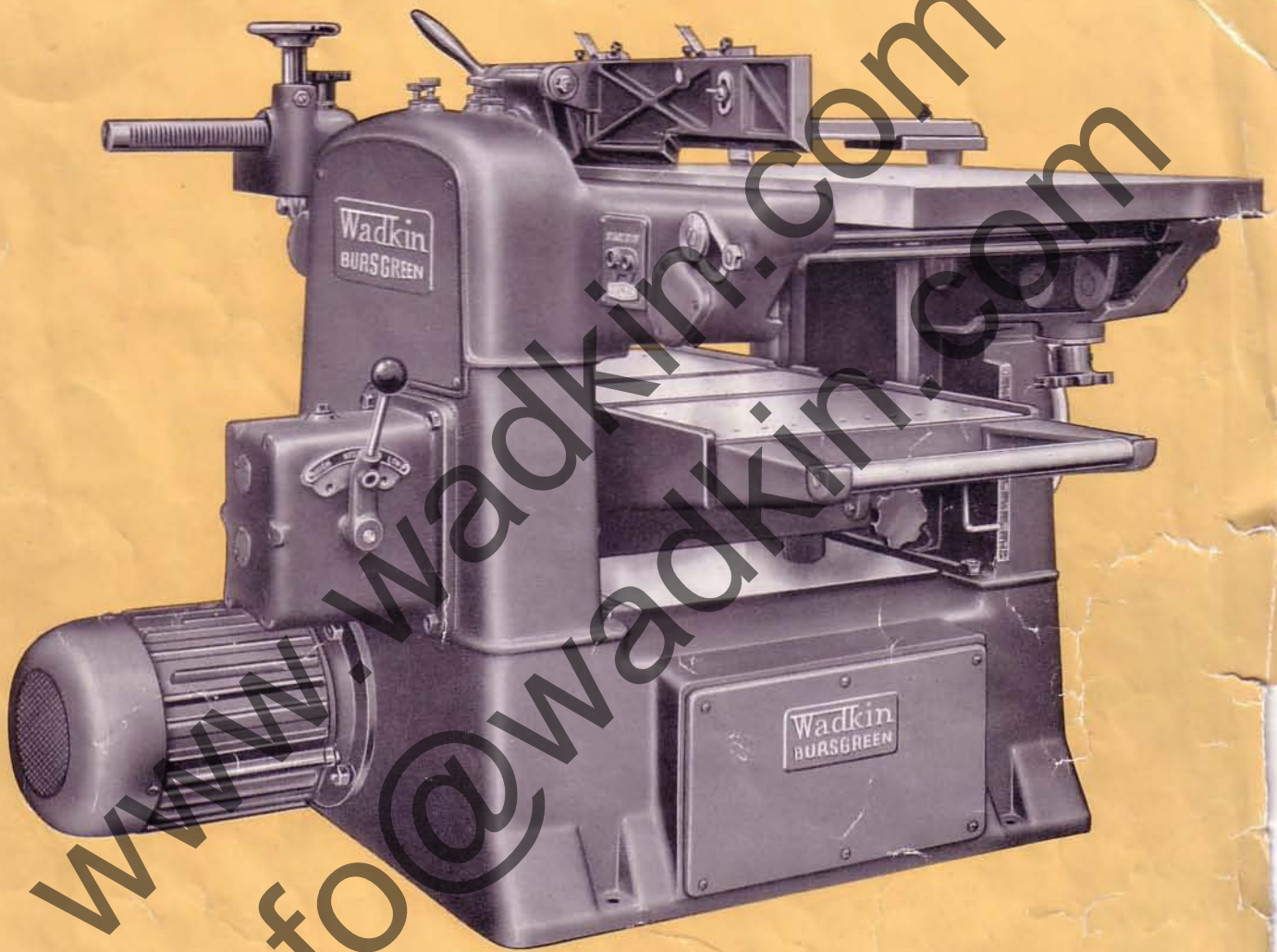


# Surface Planer and Thicknesser (UO/S)



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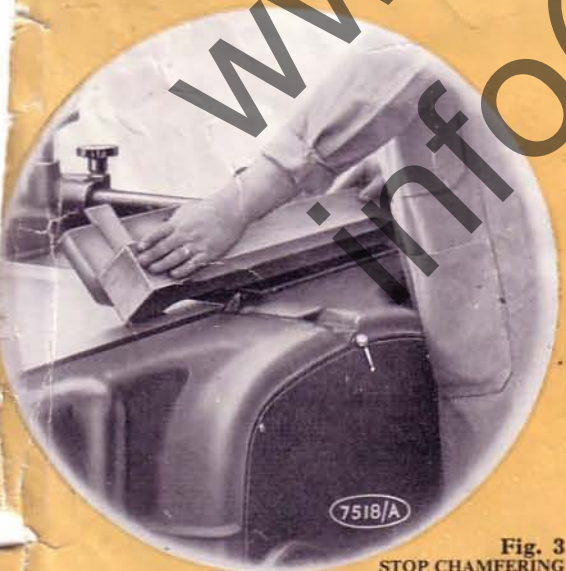
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**Fig. 1**  
**REBATING**



**Fig. 2**  
**BEVELLING**



**Fig. 3**  
**STOP CHAMFERING**

The BURSGREEN Surface Planer and Thicknesser (UO/S) is the result of intensive research and experiment in the field of high speed machine planing.

No effort has been spared to provide a machine that will continually produce work of high quality and accuracy, with the additional feature of all operating controls being conveniently placed for the operator. Push button Start and Stop controls are flush mounted in convenient positions.

The machine is of modern design, strong construction and economical in running costs.

It will be noticed that all operational adjustments are carried out by handwheels and levers, which obviate entirely the need for spanners.

*The photograph on the facing page shows a UO/S machine in use at Messrs. Abrahams & Carlisle & Co., Bradford.*

# Surface Planer and Thicknesser (UO/S)

*GIVES YOU QUALITY OF FINISH,  
ACCURACY, AND EASE OF OPERATION  
ON A WIDE RANGE OF WORK*



## CONSTRUCTION

### MAIN FRAME

Of streamlined construction, completely enclosing all working mechanisms. Has large base area for strength and rigidity under all operational conditions. (See front page illustration and Fig. 4).

### SURFACING TABLES

Are precision ground for maximum planing accuracy, and are fitted with steel lips to ensure a minimum gap space over the cutterblock. (See Fig. 8). Tables are mounted in strong links giving free and easy table rise and fall motion. Control is by handwheels at side of each table. Perfect side location is obtained by precision fitted machined faces, while all table movements are provided with rigid hand operated locks. (See Fig. 4).

The system of table mounting employed on this machine obviates jamming, minimises wear, and retains initial accuracy indefinitely.

Both tables will lower to a maximum of  $\frac{1}{8}$ ", the setting for depth of cut being indicated on graduated scales. Rebates can be cut up to a depth of  $\frac{1}{2}$ ". (See Fig. 1).

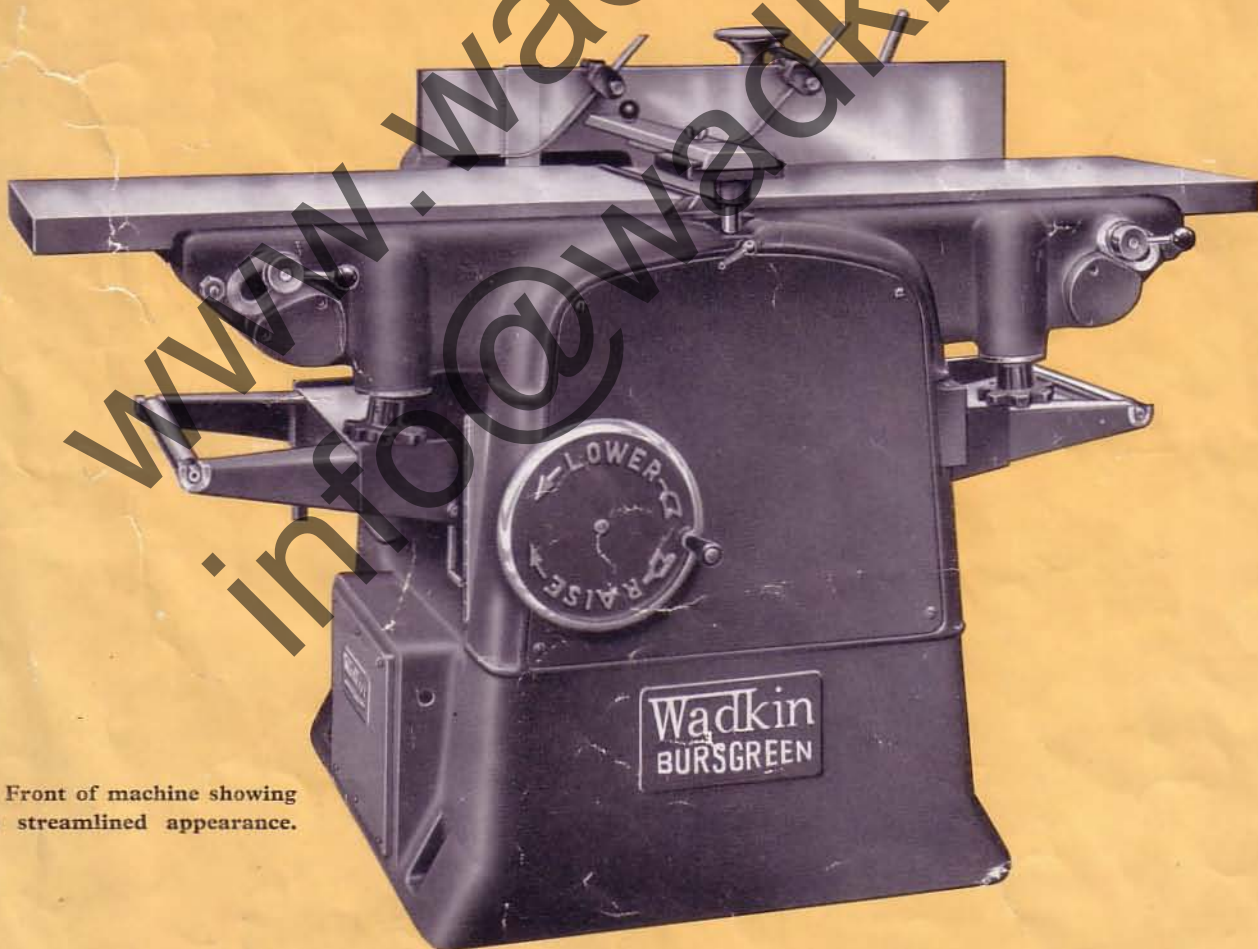


Fig. 4. Front of machine showing modern streamlined appearance.

## POWER FEED MECHANISM

(See Fig. 7).

There are two power driven feed rollers: the infeed roller in front of the cutterblock being grooved to give a good grip on the timber, and the outfeed roller which is plain to prevent marking of finished planed stock.

Drive to the feed rollers is by endless roller chain from a gearbox, this being driven from the same motor as the cutterblock.

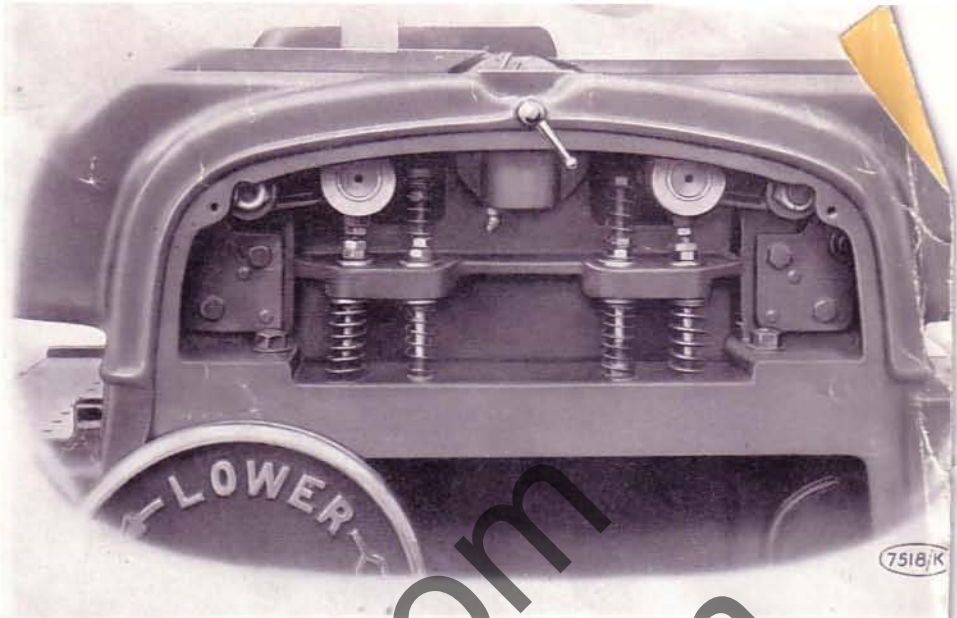


Fig. 5. Spring loaded pressure bars and feed rollers

A jockey sprocket is incorporated to enable the correct chain adjustment to be maintained. The whole of the feed mechanism is completely guarded by easily removable covers.

Front and rear spring loaded radial type pressure bars are fitted adjacent to the cutterblock, for holding narrow and thin timber sections firmly to the table while being planed. (See Fig. 5).

## THICKENING TABLE

A rigid, deep sectioned casting, mounted in wide slides, and raised and lowered by means of handwheel operated chain reduction gear. Raising screws are fitted with anti-friction ball thrust washers to take the weight of the table and to give smooth and effortless rise and fall motion.

The whole of the table raising mechanism is totally enclosed within the main machine frame to guard against dust and chippings entering, thereby ensuring ease of operation.

Two anti-friction rollers are fitted into the thickening table for ease of feeding, and have simultaneous vertical adjustment by small handwheel at the infeed end of the machine.

Outboard arms and anti-friction rollers are fitted to the machine to give a virtual table length of 52".

An index scale is provided to show the exact thickness at which the machine is planing.

## THE FENCE (See Fig. 6).

The fence, strongly built, and ground on the front face, provides a perfect guide for feeding stock past the cutterblock.

It can be moved to any desired position across the table by handwheel, and may be canted to any angle up to 45° from the vertical for chamfering and angular work. (See Figs. 2 and 3).

Dual pressure springs are fitted for holding down material on the table whilst planing over the cutters.

Rigid hand operated locks are provided for all movements.

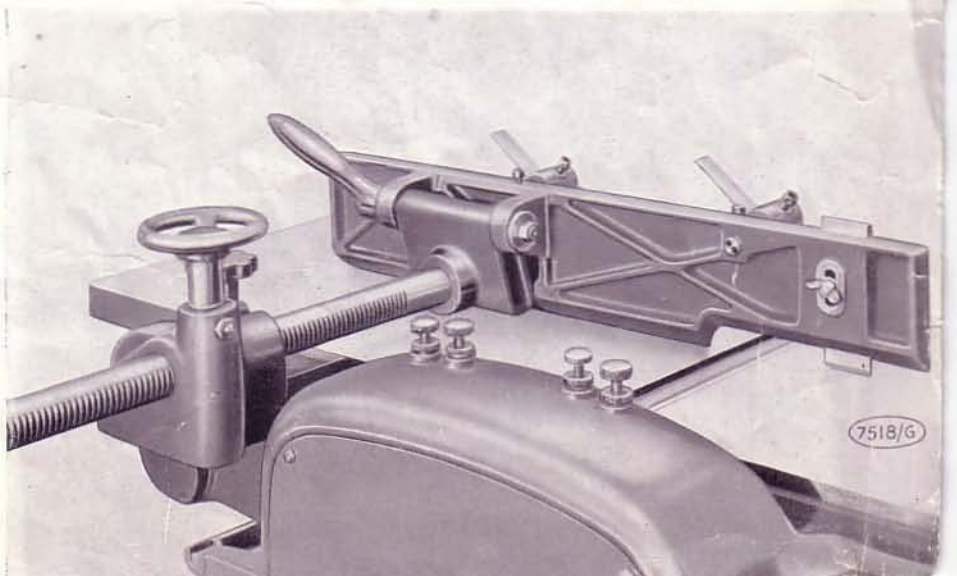


Fig. 6. View of machine fence

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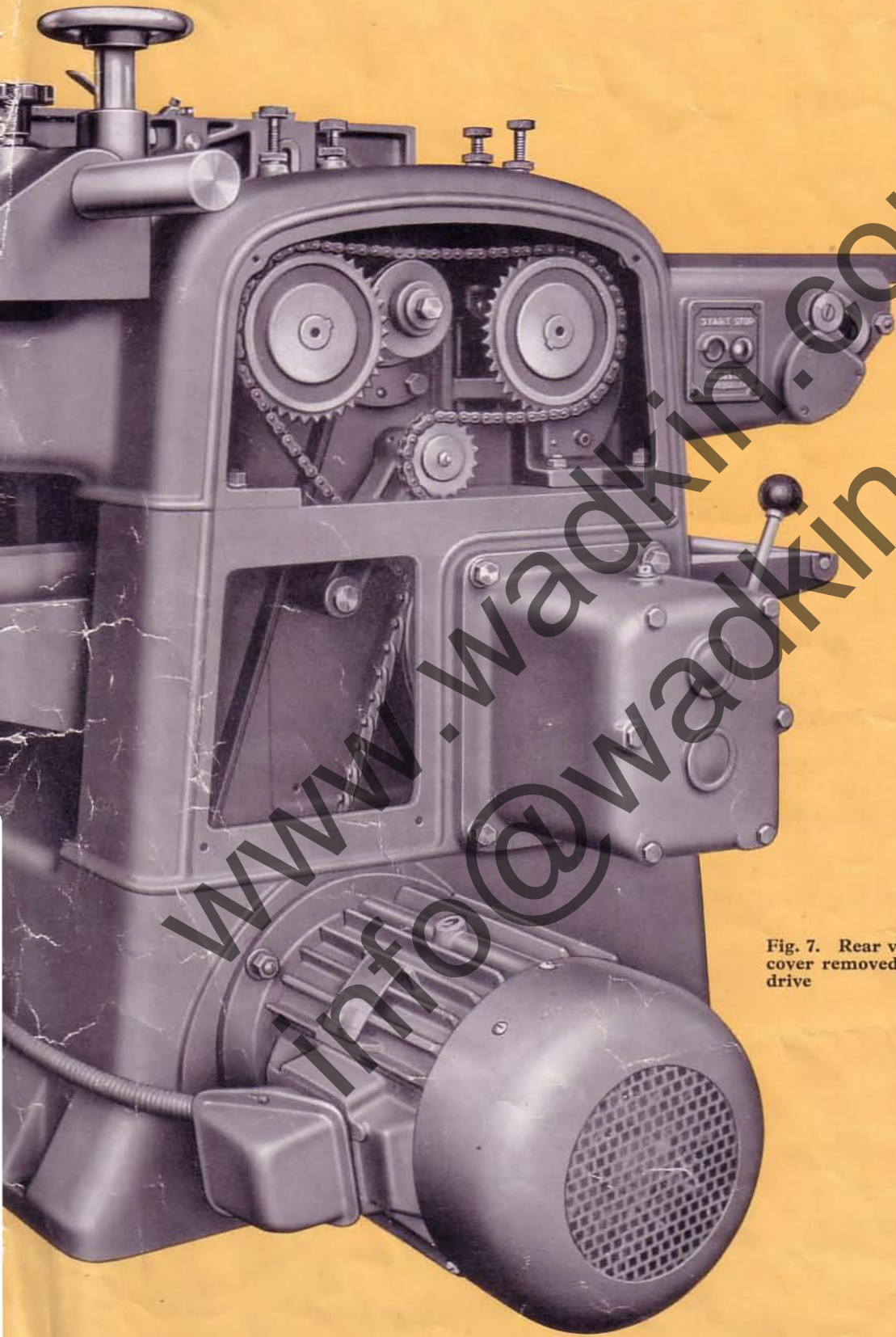


Fig. 7. Rear view of machine with cover removed to show feed roller drive

**GEARBOX** (See front page illustration and Fig. 7).

The constant mesh gearbox is mounted on the rear of the machine frame and provides two rates of feed for the power feed rollers of 20 and 40 feet per minute. Alternatively a three speed gear box can be fitted providing speeds of 20, 30 and 45 feet per minute.

All gears are machine cut from high quality steel, and revolve continuously in oil.

Control is by the handlever mounted on the front of the gearbox, which can be operated to select the feeding speed required while the machine is running.

### **SAFETY GUARD**

A guard is provided which is suitable for practically every kind of operation worked over the cutters, and does not interfere in any way with the operational functions of the machine.

It is vertically and horizontally adjustable ; hand locks being provided in each case. The whole guard unit may be removed from the machine in a matter of seconds if not required.

### **CUTTER SETTING ATTACHMENT**

(See Fig. 8).

This attachment, which is supplied without extra cost, ensures that both cutters are set exactly parallel to the rear table and of equal projection, the whole setting operation taking no more than a few minutes. The attachment simultaneously sets the cutters in correct relationship with the table edge thereby ensuring perfect rebates.

### **THE CUTTERBLOCK**

Is of the circular safety type, manufactured from high quality steel, accurately ground and dynamically balanced for vibrationless cutting conditions.

It is mounted on precision ball bearings in dust proof housings and is supplied complete with two cutters arranged to give a shearing cut.

The cutting circle diameter is  $4\frac{1}{2}$ " and the cutterblock runs at 5,000 r.p.m.

Drive for the cutterblock is by endless belting from a 5 h.p. totally enclosed fan cooled motor provided with belt tensioning device and mounted to the rear of the machine. (See Fig. 7).

**Fig. 8. Cutter setting attachment**





### SPECIFICATION

Planing and thicknessing capacity	18" wide × 9" deep	457 mm. × 229 mm.
Rates of power feed : 2 speed gear box	20 and 40 ft. per min.	6 and 12 met. per min.
3 speed gear box	20, 30 and 45 ft. per min.	6, 9 and 14 m. per min.
Maximum depth of rebate	½"	12.7 mm.
Rise and fall of surfacing tables	½"	12.7 mm.
Length of surfacing table	5' 6"	1676 mm.
Cutting circle diameter of cutterblock	4½"	114.3 mm.
Speed of cutterblock	5,000 r.p.m.	
Diameter of feed rollers	3"	76.2 mm.
Length of thicknessing table	36"	914 mm.
Horse power of driving motor	5	
Syn. speed of motor	1,500 r.p.m.	
Fence will cant up to	45°	
Height of surfacing table from floor (top position)	34½"	876 mm.
Approximate floor space	4' 6" × 5' 6"	1371 mm. × 1676 mm.
<b>Shipping Specifications :—</b>		
Approximate gross weight	2800 lbs.	1270 kilos
Approximate nett weight	2134 lbs.	968 kilos
Approximate measurements	114 cu. ft.	3.23 cu. met.

### CODE WORD

18" × 9" Surface planer and Thicknesser (UO/S) "UOSTS"

### DETAILS INCLUDED IN THE PRICE

Motor and Control Gear. One Pair H.S.S. Planing Cutters. Cutter Setting Attachment. Safety Guard.  
Fence. Cutterblock Key. Grease Gun. Tin of Lubricant.

### SALES & SERVICE

Telegrams : Woodworker - Phone - Leicester  
 Telephones : Leicester } 67114 (4 lines)  
 66021 (3 lines)  
 London Office :  
 Brookfield House, 62-64, Brook Street, W.1  
 Telephones : MAYfair 7048 & 9.

**Wadkin Ltd.**  
 Green Lane Works, Leicester

BURSGREEN machines are manufactured by :  
 BURSGREEN (DURHAM) LTD., Fence Houses,  
 Houghton-le-Spring, Co. Durham.  
 BURSGREEN (COLNE) LTD., Lodge Holme,  
 Trawden, Nr. Colne, Lancs.