

WORKMATE

# To get the best out of your Workmate

Purchased 4/11/1970.

Mr R. JEFFREY  
"Casa Sol y Mar"  
Partida la Batalla  
MORAIRA — TEULADA

(ALICANTE) } 10/4/72  
to  
SPAIN } 13/7/79

## read this...

What, all of it — do I have to ?

Well, it depends! The Workmate is so simple to use you can't really go wrong — it has 2 vice handles, 2 clamp knobs and 1 foot adjuster to twiddle (and that's all).

— But if you want to get the BEST out of your Workmate, we still say — read this.

5/12/51  
16/1/72

MR. R. JEFFREY

SOUTHEND-ON-SEA,  
ESSEX,  
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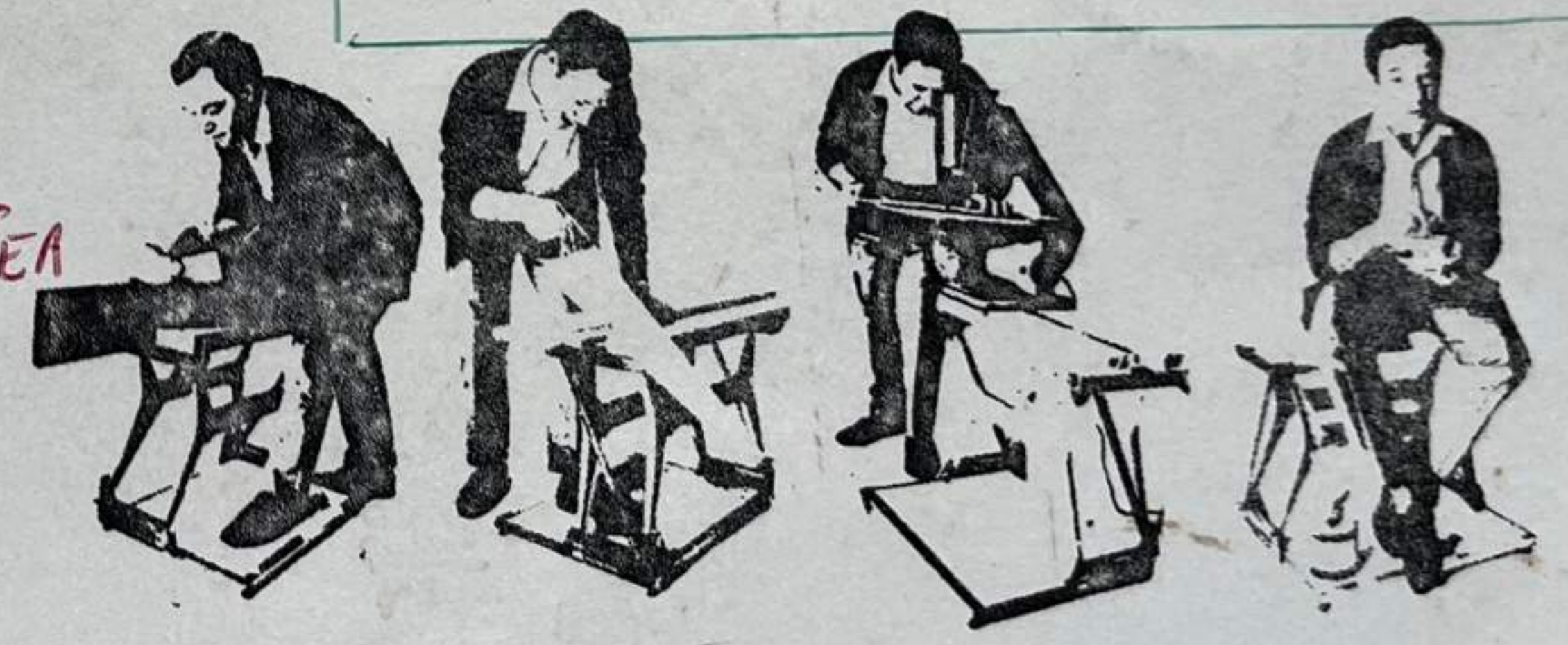
from 15/2/84

ROCHFORD,  
ESSEX,

12/9/79  
to  
22/11/83



MR. R. JEFFREY  
Tudor Estate  
WEST WACTON - ON - SEA  
Essex,



December 1970.

ADDITIONS AND AMENDMENTS

1. AUTOMATIC SAFETY CATCH

An automatic safety catch has now been added (see Section 4). This engages automatically by gravity when the WORKMATE is within about  $\frac{1}{4}$ " of its full-up position, thus preventing accidental collapse. To fold the WORKMATE again, whilst slackening the 2 clamps one turn only, and (and holding the top up other than by the metal brackets), trip the safety catch by pressing its folded tag downwards to allow the unit to fold, - and LOWER THE TOP GENTLY.

N.B. IT IS ABSOLUTELY ESSENTIAL THAT THE SAFETY CATCH PLATE SWIVELS COMPLETELY FREELY AT ALL TIMES.

2. THE TWO HOLES IN THE FRONT BAR

The two  $\frac{1}{2}$ " diameter holes drilled in the front bar of the WORKMATE are for the attachment of the TEAM-MATE (which attaches by either of these two holes), - should this be bought simultaneously or later on. Obviously 'point' loads should not be clamped in WORKMATE'S vice directly opposite these holes.

3. ADJUSTABLE FOOT CONTROL NOW GREY

Paragraph 4.4 refers to a 'red' remote-control knob for adjusting the one foot: this is now a plain grey (plastic) shaft, which is turned either way as required.

4. DON'T KEEP WORKMATE IN A HOT PLACE

Especially if kept for a time in e.g. a damp shed or garage, and then placed near e.g. a central heating radiator, the Beech tops - though seasoned - will tend to crack as the timber dries suddenly.

5. WORKMATE -ONLY HANDBOOK

This handbook refers only to the WORKMATE. Instructions for use of the TEAM-MATE portable bench top are supplied separately.

6. SOME EXTRA USEFUL "EXTENSIONS"

are shown on the back of our yellow leaflet headed "Workmate simplifies work, multiplies output".

7. GUARANTEE: The products manufactured by Mate Tools Limited are guaranteed for a period of 5 years against defective Workmanship and Materials.

## I N D E X

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## F O R E W O R D

*HEAVENS, IT DOES LOOK SMALL AND LOW!*

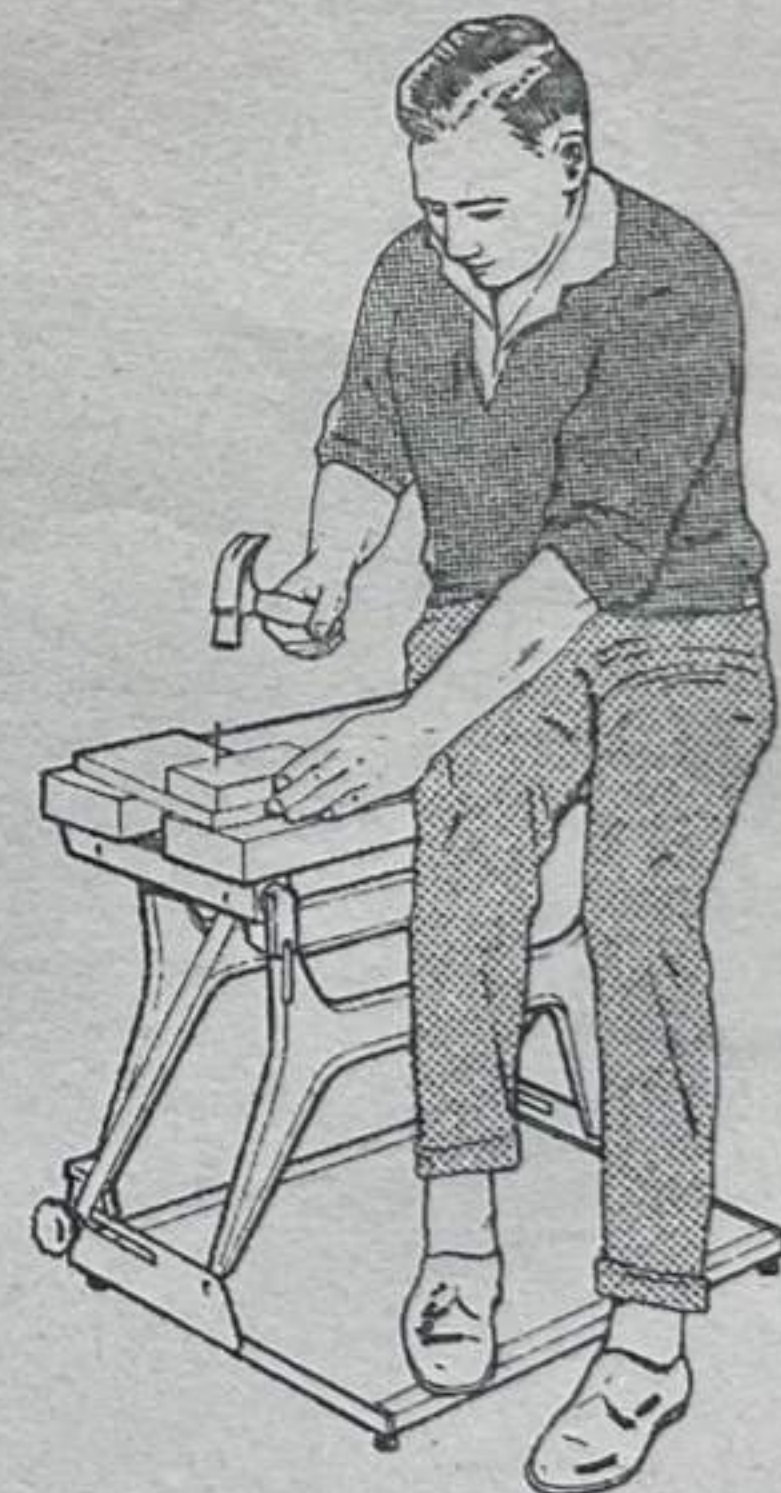
Most people at first sight compare the Workmate with a workbench—so this may be your first reaction. But you will soon find its size is its biggest single *advantage*. We have kept it compact so it will be as light and easy to carry as possible; which means you can *always* take and use it anywhere (and, of course, easily tuck it out of the way). And if it wasn't the height it is, you couldn't *sit in comfort at one end and work at the other* on so many occasions - e.g. when drilling, hammering, chiselling, metal-working or simply assembling things.

Nor could you use it as a *sawhorse*, or for *standing on to decorate*. And when you came to mount power tools like sawbenches you would find them too high if they were at workbench level.

It will, of course, take a little while for you to become familiar enough with your Workmate to get the best out of it, but you will soon discover that:-

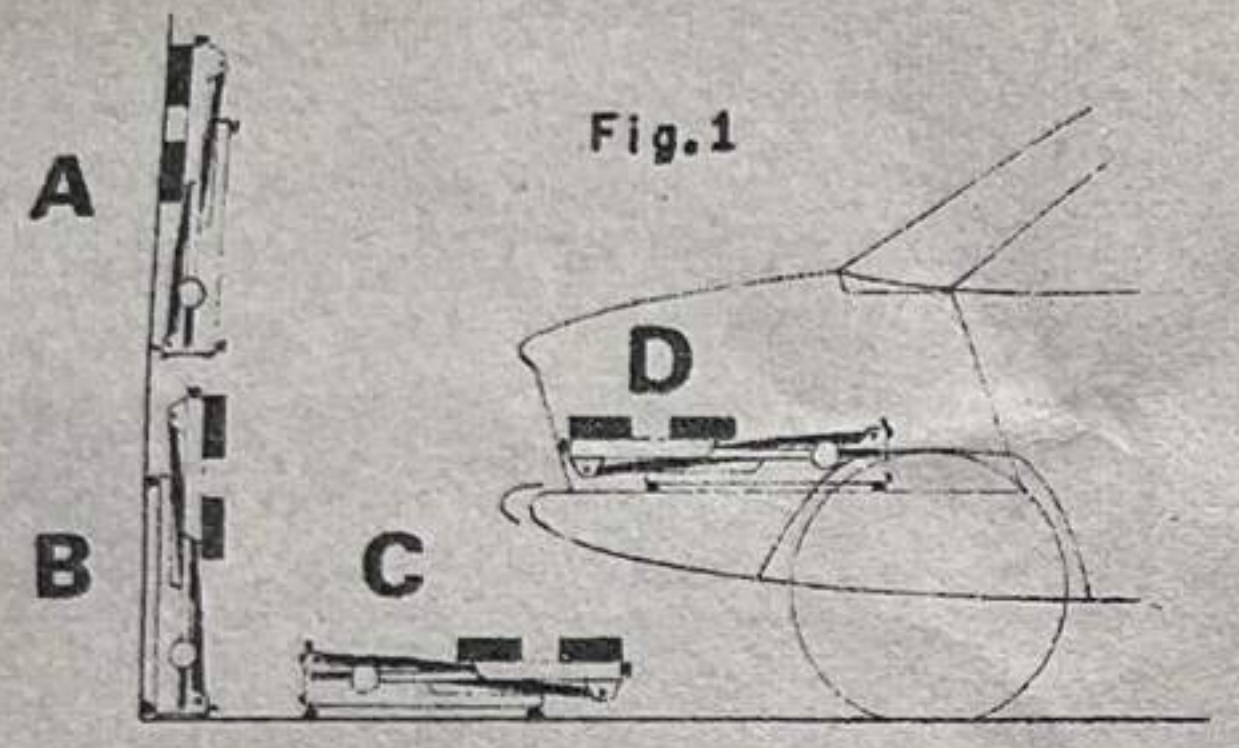
1. It can help on just about *every* job - which is more than you could ever say of a workbench (or of any other tool, including an electric drill, for that matter).
2. Because of this it can very quickly pay for itself.
3. It is very solidly built; and is a pleasure to own and use.
4. It will handle bigger things than a workbench could—like a 20' plank or an 8' x 4' sheet of hardboard, etc.
5. You'll never stop finding new applications, uses and extensions of the Workmate (the rest of this handbook gives you just a *few* of its basic applications).

If you have any comments on this booklet—or have discovered a useful tip you'd like us to incorporate in future handbook reprints, we'd be glad to hear from you!



## 2. THE OUT-OF-WORK WORKMATE

Always keep the clamp knobs tight to avoid accidental unfolding.



- A. Hang it on the wall, in a cupboard, etc. with a pair of Workmate hooks (kit with fixing screws, rawlplugs, etc. 10/-d.). See para. 14.7 for details.
- or B. Stand it on end—suitcase fashion—on its 4 rubber studs. It needs a fairly flat and level surface for this. If you regularly keep it this way in a place where it can easily be knocked over, consider fixing a small strap or a pair of Workmate hooks low down on an adjacent 'wall' to prevent it toppling over.
- or C. Lay it flat anywhere.
- or D. Keep it in the back of your car or van if you often use it in various places.

## 3. CARRYING IT

There are two 'best' ways of carrying the Workmate; in both cases you pick it up from its suitcase-style standing position.

**METHOD A** (see Fig. 2) With the vice bars towards you, lift under the front bar (balancing as required if an offset woodworking vice is fitted). To do this, you need to have the table-vice OPEN, in order to get your hand into the gap.

**METHOD B** (see Fig. 3) With the base-board towards you, reach down and lift under the cross bar of the front leg casting. (This way you lift the unit higher off the floor, but you may find the casting 'cuts' uncomfortably into your fingers after a while).

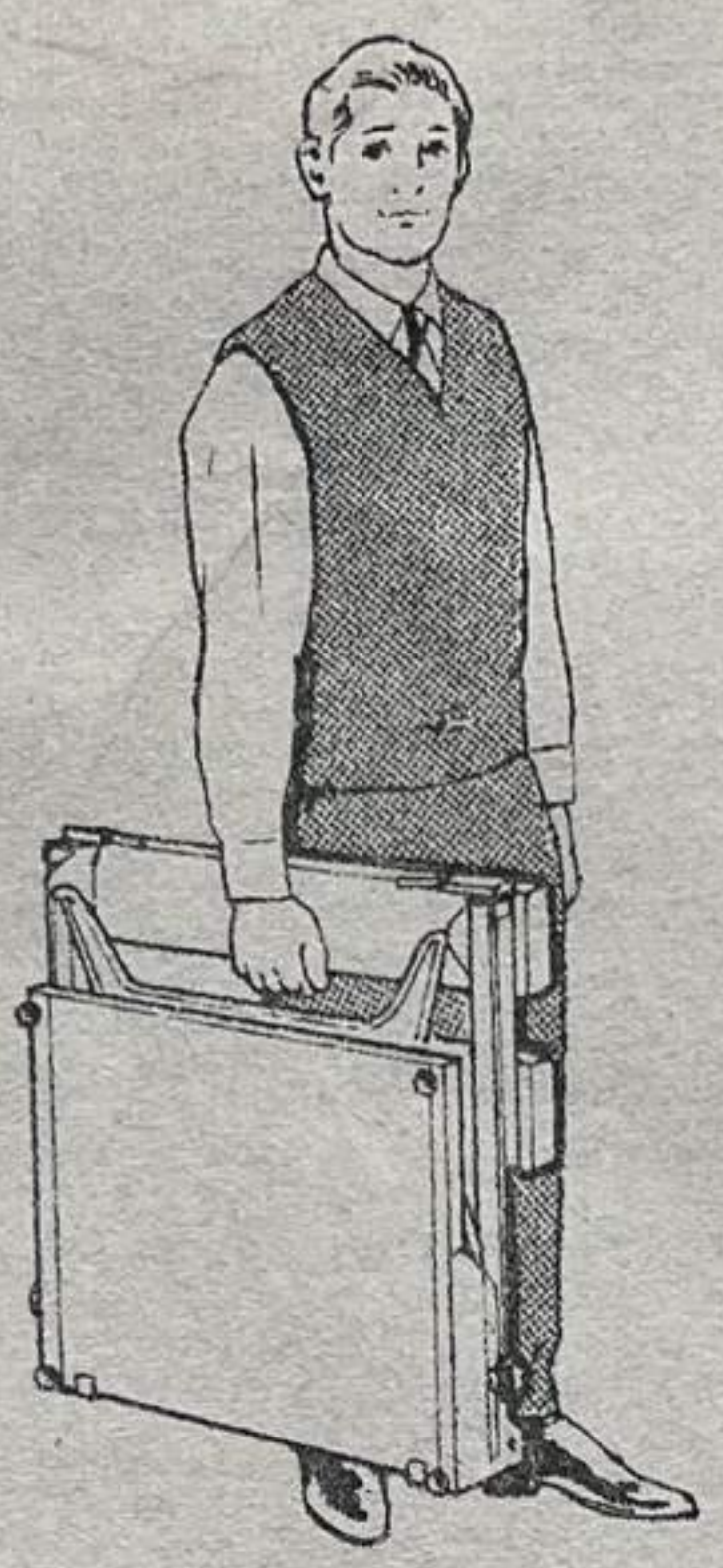


Fig. 2

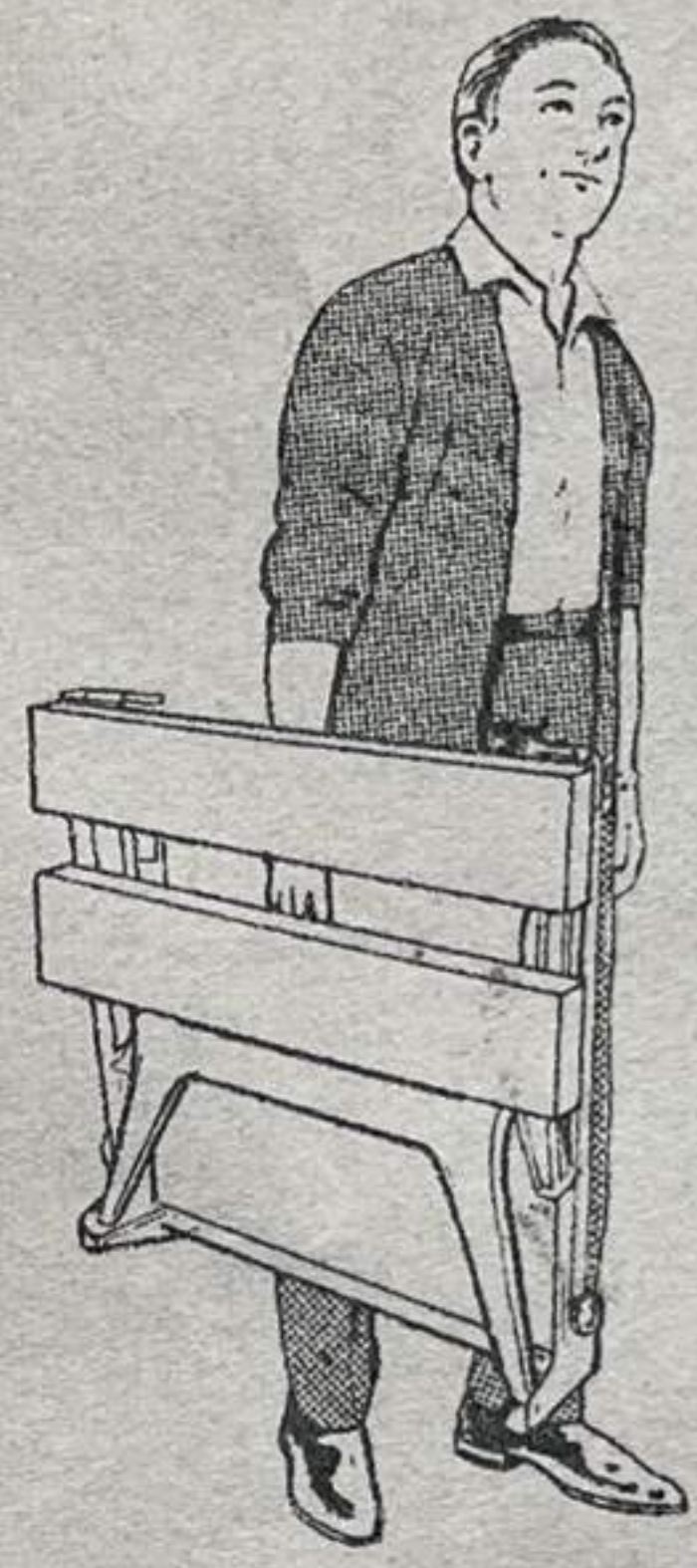


Fig. 3

## 4. GETTING THE WORKMATE READY FOR WORK

### 4.1 SAFETY WARNINGS

THE CLAMP-KNOBS SHOULD ALWAYS BE LOCKED TIGHT—WHETHER THE UNIT IS ERECTED OR FOLDED.

Especially, NEVER LEAVE THE UNIT ERECTED WITHOUT THE CLAMPS TIGHTENED: friction in the pivots and stays may hold it up but, of course, it is liable to collapse at any time.

Before use: CHECK that the clamps are tight and properly seated and fully home in their slots. On no account must you set the unit up for use with the clamps half-way along the slots: there are only 2 safe or intended positions of use—fully up and fully down!

CHECK this by 'loading', i.e. pushing the top to-and-fro.

When lowering the top to the folded position, hold on the wooden vice bars, NOT on the top side metal channels; so as to avoid pinching the fingers between them and the side stays as the top is lowered.

**IMPORTANT:** Despite these obvious cautions, please note that the large size of the clamp knobs, the fine pitch of threads used, and the fact that the stays pull or push up and down in the slots—not along their length—ensure that when tightened by the normal hand pressure of an average man or woman they are perfectly safe and will not slip.

### 4.2 ERECTING THE WORKMATE

There are two best ways of erecting the unit:  
**METHOD A**

1. Stand the unit suitcase-fashion, with baseboard toward you.
2. Undo both clamps about half a turn only (or the nut may tend to jump out of the slot).
3. Separate the top and the base by pulling the base towards you and downwards and simultaneously pushing the top backwards and up, as shown in Fig. 4.
4. Hold the unit thus fully open, and make sure that each clamp nut has travelled fully home in its slot, and is still seated in its slot, lock the clamp knobs tightly, one at a time.

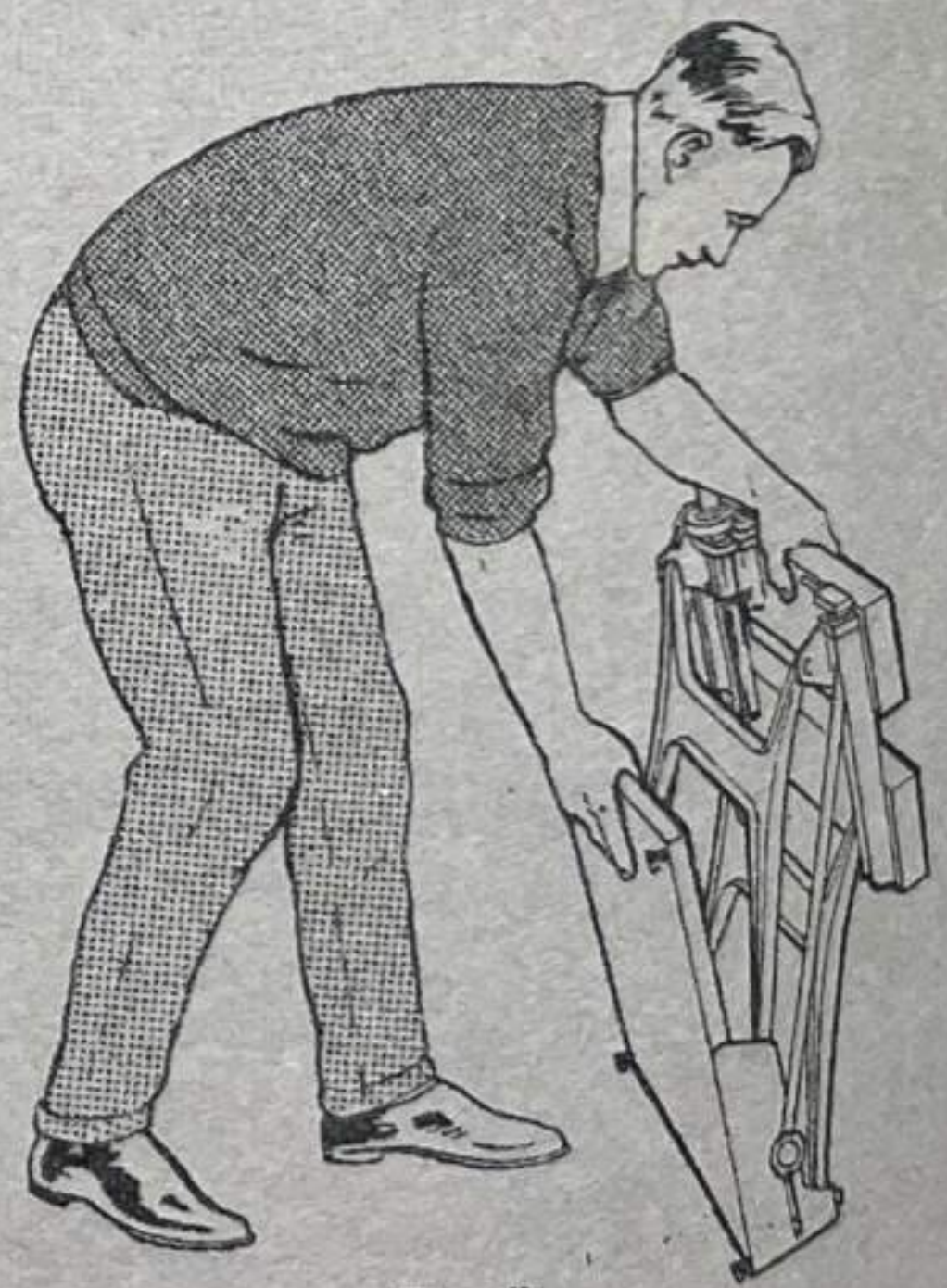


Fig. 4

## 4.3 ERECTING THE WORKMATE

## METHOD B

1. Lay the unit flat; with the vice handles towards you.
2. Undo both clamps about *half a turn only*.
3. Holding the baseboard down with one foot if necessary, swing the top up fully into position. The clamp-nuts on the bottom of the sidestays may tend to stick a little in the slots, so it is best to lift the top by *placing one hand under each side-stay* during this operation, as shown in Fig. 5, which prevents this from happening.
4. For fastening, repeat as sequence 4 in Method A.

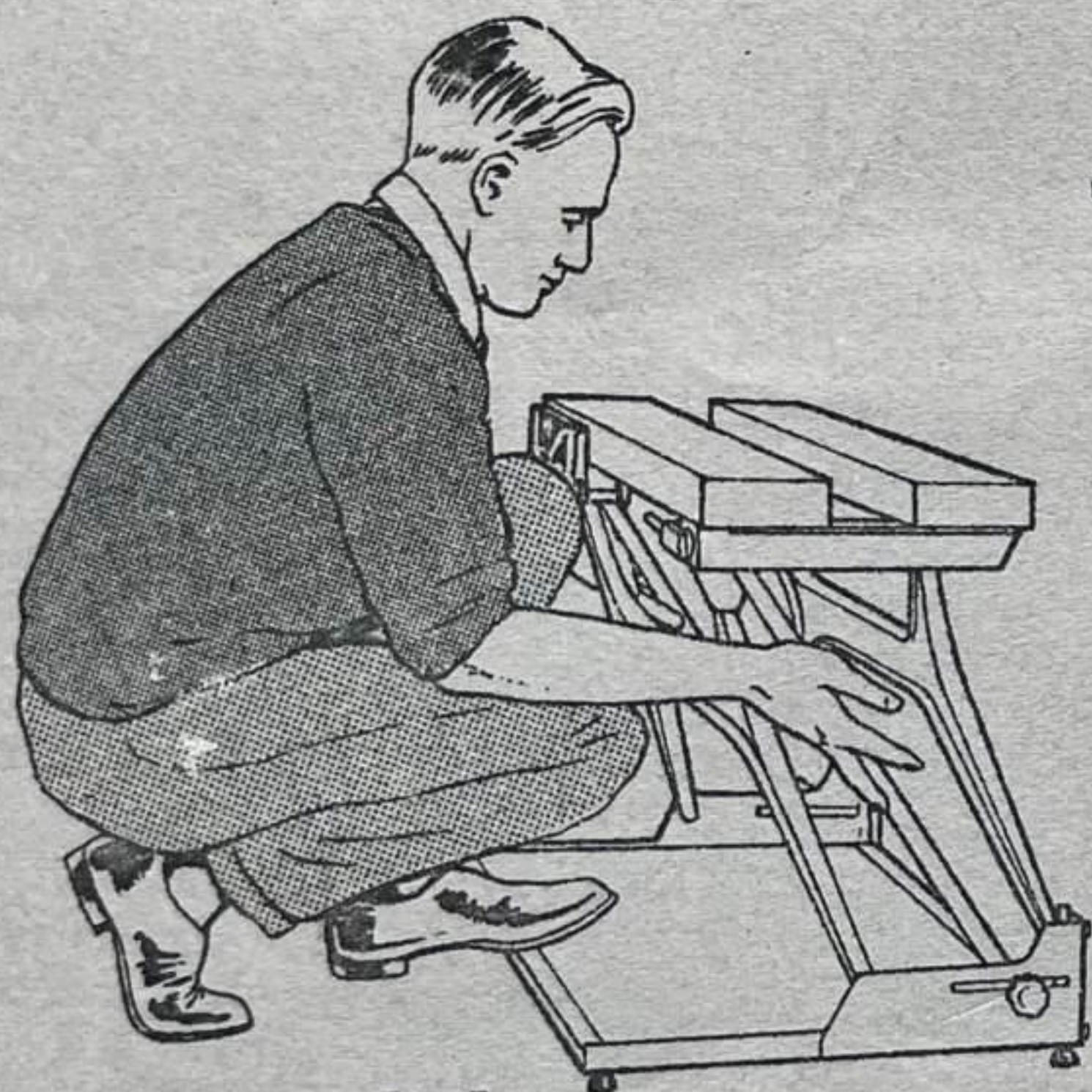


Fig. 5

## 4.4 LEVELLING

Floors are, of course, seldom level, so you can adjust the right rear foot by up to  $\frac{5}{16}$ " above or below the plane of the other three feet, by screwing the red remote-control knob up or down. You may, of course, need to re-adjust this each time you move the Workmate to another position.

All four feet have tilt-action glides so as not to damage floors, or strain themselves.

## 5. TUCKING THE WORKMATE TIDILY AWAY

- 5.1 Put the table-vice in its fully open position (for easier carrying).
- 5.2 Remove excessive dust or shavings if you want to (a brush is best for this).
- 5.3 Crouch in front of the unit—reach around and relax both clamp knobs approximately one  $\frac{1}{2}$  turn, at the same time holding the top up at all times with one hand. **HOLD IT ON THE WOODEN BARS, NOT ON THE SIDE METAL CHANNELS**, so as to avoid pinching the fingers as the top is lowered.
- 5.4 With the top fully down, lock the clamp knobs again tightly to keep it shut.
- 5.5 Fold the vice-handle spindles to their 'flat' position (for tidiness).

## 6. USING THE TABLE-VICE

## 6.1 THREE WAYS OF WINDING THE HANDLES

There are three different 'holds' on the vice handles:

- a) For *fast winding*, unfold the handle spindles and use these.
- b) For *applying normal pressure* hold the main body of the handle between thumbs and forefingers, to turn it.
- c) For *greater pressure* you can fold the handle 'flat' and use it as a lever (provided, of course, it is not obstructed by anything, e.g. a permanently fitted wood-vice or a workpiece projecting forward over the top of the vice bars).

## 6.2 TAPER MOTION

The table-vice will operate with parallel or taper motion, by winding the vice-handles as desired together or singly, and in the same or opposite directions.

You cannot strain anything this way; but, if you've had the vice fully closed at both ends, don't open one end fully without slackening the other a little, as the 'closed' tip will tend to bind a little, since it actually swings forward a fraction of an inch as the vice bar pivots.

When clamping long parallel articles it will be fairly obvious when the vice is gripping properly along its length.

On shorter parallel articles, e.g. the pegs with which tools are being attached (see section 13), it is best to visually check that the vice bars are approximately parallel for the best grip.

## 6.3 WARNING

It is *dangerous* to wind the vice shut whilst sitting on top! (Apart from which, your weight on the rear bar will make this difficult to do.)

## 7. FITTING OTHER VICES AND CLAMPS

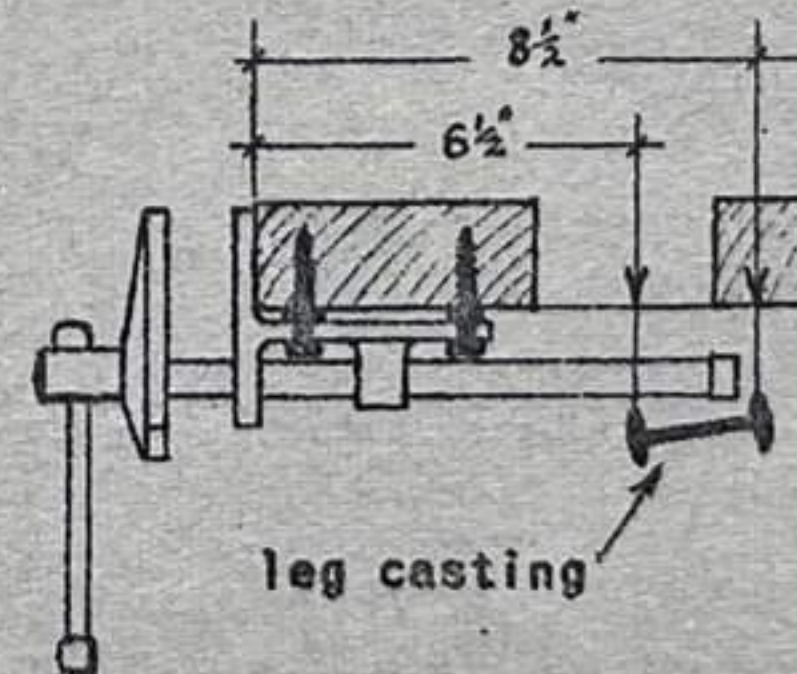
A wide range of wood and metal working vices, G-Cramps, etc. can be used. These can be very handy, as will be apparent from the points brought out in this section.

## 7.1 PERMANENTLY FITTED WOOD-WORKING VICES

The weight of even a 'small' vice (e.g. the Record 55 Woodcraft) may be up to 11 lbs—one-third the weight of the Workmate! Carrying a weight of 43 lbs is a lot less comfortable than one of 32 lbs—so keep to the lightest vice that will suit your purpose.

The front-to-rear dimension of the folded unit also increases, of course.

Before buying a vice, check its vital statistics to see that it will fit in between the top bar and the folded legs, as shown in Fig. 6.



Allow for spacers if necessary to lower vice 'flush' with worktop; then vice must fit into gap between mounting plane (underside of top bars) and alloy leg casting, of:-

1 1/2" gap at 6 1/2" back, and  
1 1/2" gap at 8 1/2" back

Fig. 6

### 7.2 THE FITTING OF 'PERMANENT' WOOD-WORKING VICES

Permanent vices are best fitted on the front bar which is, of course, solidly mounted on the unit; also this puts them on the same side as the projecting standing platform. We recommend they be fitted on the *left-hand side* (facing the unit) for right-handed people, and vice-versa. The outside edge of the vice should be about 4" in from the end of the top bar so as to clear the table-vice handle; and to keep the centre and other end of the unit clear for sitting on and for use as a saw-horse.

We suggest you use coach-screws about  $\frac{5}{16}$ " dia. x  $1\frac{1}{4}$ " to 2" long fitted from underneath into suitable drilled holes, to avoid the unsightly dirt traps on the work-top which would result from using coach bolts etc. right through. Experiment on a piece of scrap to find the right drill hole sizes for the screws you are using. You will probably need a small size pilot hole (say  $\frac{3}{16}$ " for the threaded portion of the screw, but a  $\frac{5}{16}$ " hole for the plain shank portion).

You may need to fit spacer washers to lower the vice to make it flush with the worktop. (The Record 55, for instance, needs about  $\frac{1}{4}$ " packing.)

It is best to fit the vice so that its back plate touches the Beech bar—to avoid yet another dirt trap. This may necessitate cutting a small piece off the front bottom edge of the Beech bar to clear the radius in the casting of the vice—a feature found in most vices of this type.

Remember to fit hardwood, plywood, etc. linings to the jaws of your wood-working vice! (We say this not only to protect your work pieces—but the thickness of the 'rear' lining in the jaw is generally necessary to ensure that a large flat article, e.g. a door held in the vice, see para. 7.3—will clear the folded handle of the Workmate's table-vice.)

### 7.3 USES OF 'PERMANENT' WOOD-WORKING VICES

Apart from being handy for small jobs, there are many other possible uses for fitted vices.

Figure 7 shows how the table-vice and the wood-working vice can be used together—in this case for the accurate drilling of a component.

A permanent vice can also be used as shown in Fig.8 (planing a door).

*NOTE:* The slides and screw of a 'permanent' wood-working vice generally will 'obstruct' the slot between the vice bars when it is closed; so, if you are sawing down the slot, open the wood-working vice fully, if necessary, to get the slot clear.

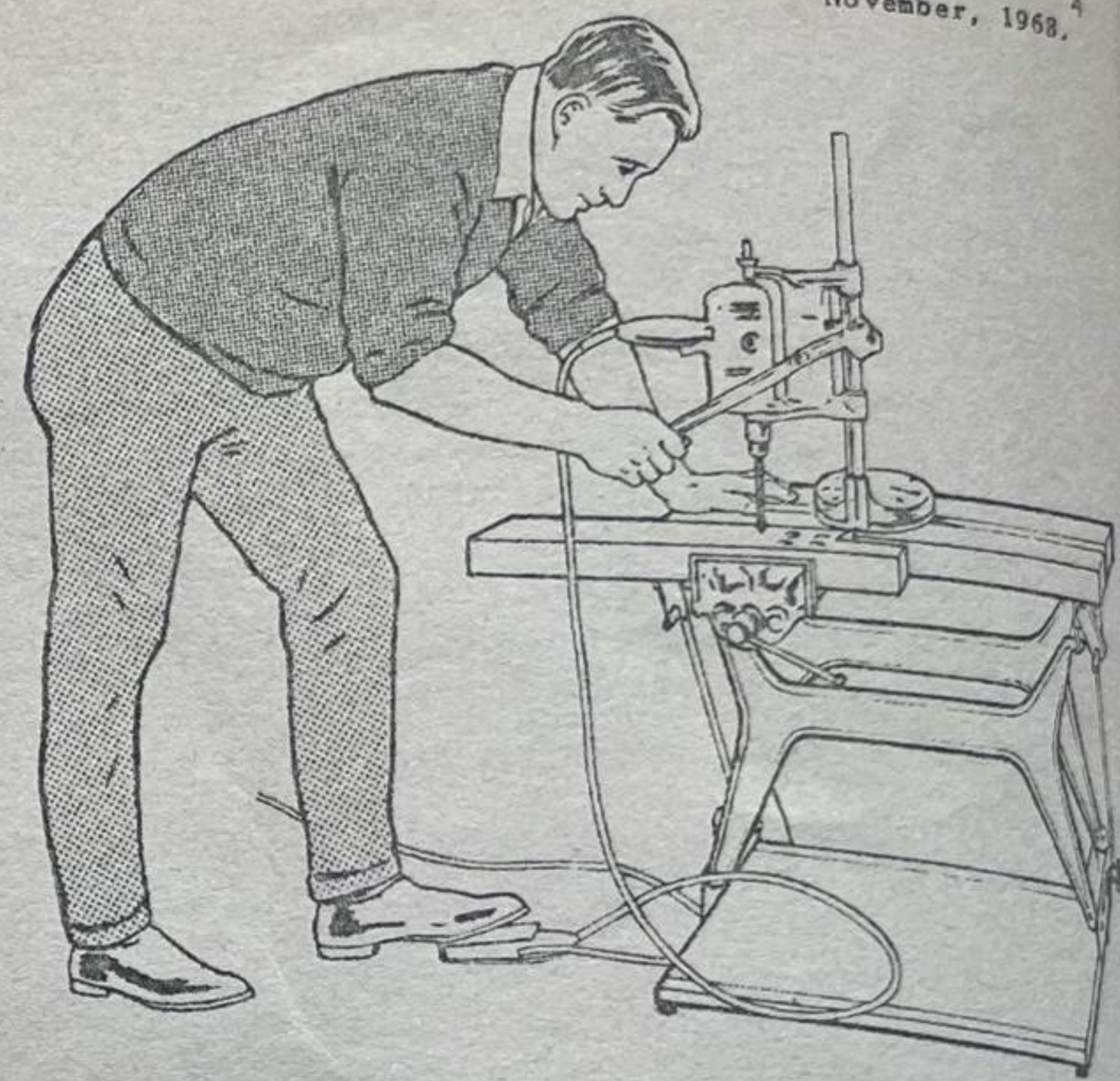


Fig.7

### 7.4 RECOMMENDED 'PERMANENT' WOOD-WORKING VICES

The following vices are recommended as suitable:

DESCRIPTION	JAW WIDTH	JAW OPENING (w/o linings)	WEIGHT	RECOMMENDED RETAIL PRICE
Record No.50 Amateur Wood-work Vice	6" - 150mm	4½" - 115mm	6½ lbs - 3.0 kg.	£1. 13. 6.
Record 55 Woodcraft Vice	6½" - 165mm	6⅛" - 156mm	11 lbs - 5.0 kg.	£2. 11. 6.
Record No.194 Woodworkers Vice	6" - 150mm	4½" - 115mm	6¼ lbs - 2.8 kg.	£1. 13. 3.
Paramo 60 Amateur Wood-workers Vice	6" - 152mm	4½" - 114mm	5½ lbs - 2.49kg.	£1. 13. 0.
Parry & Bott 1500 (chromed)	6" - 150mm	6" - 150mm	6½ lbs - 3.0 kg.	£1. 12. 0.
Parry & Bott 1501 (polished)	6" - 150mm	6" - 150mm	6½ lbs - 3.0 kg.	£1. 10. 0.
Rededa No. 30	6" - 150mm	4½" - 115mm	5¼ lbs - 2.38kg.	£1. 7. 6.
Rededa No. 32 (Quick-action release)	7" - 178mm	6" - 150mm	12 lbs - 5.5 kg.	£3. 0. 6.
Parkinson No.42	6" - 150mm	4½" - 115mm	6 lbs. - 2.7 kg.	£1. 8. 6.
Hicraft HC14	6" - 150mm	4½" - 115mm	7 lbs. - 3.18kg.	£1. 13. 6.

### 7.5 CLAMP-ON WOOD-WORKING VICES

These are probably the best solution for most people.

#### POINTS IN FAVOUR:

- These are handy because they don't 'permanently' put up the carrying weight or size of the unit.
- Since they stand 'proud', they enable one to saw close in to the vice jaw - and are thus generally more suitable for working metal articles as well as timber.
- You can, of course, vary their position on the worktop; and the fact that they are 'higher' may be an advantage.

Fig.8 shows how a door can be held whilst planing its edge, fitting locks, etc. Note the blocks on the floor and on the baseboard.

#### POINTS AGAINST:

- They prevent the use of the worktop for, e.g. supporting large sheet materials, and may have to be fixed and removed frequently; and they must usually be removed when the Workmate is folded up or hung on the Wallmate brackets, unless these are suitably spaced off the wall on blocks.

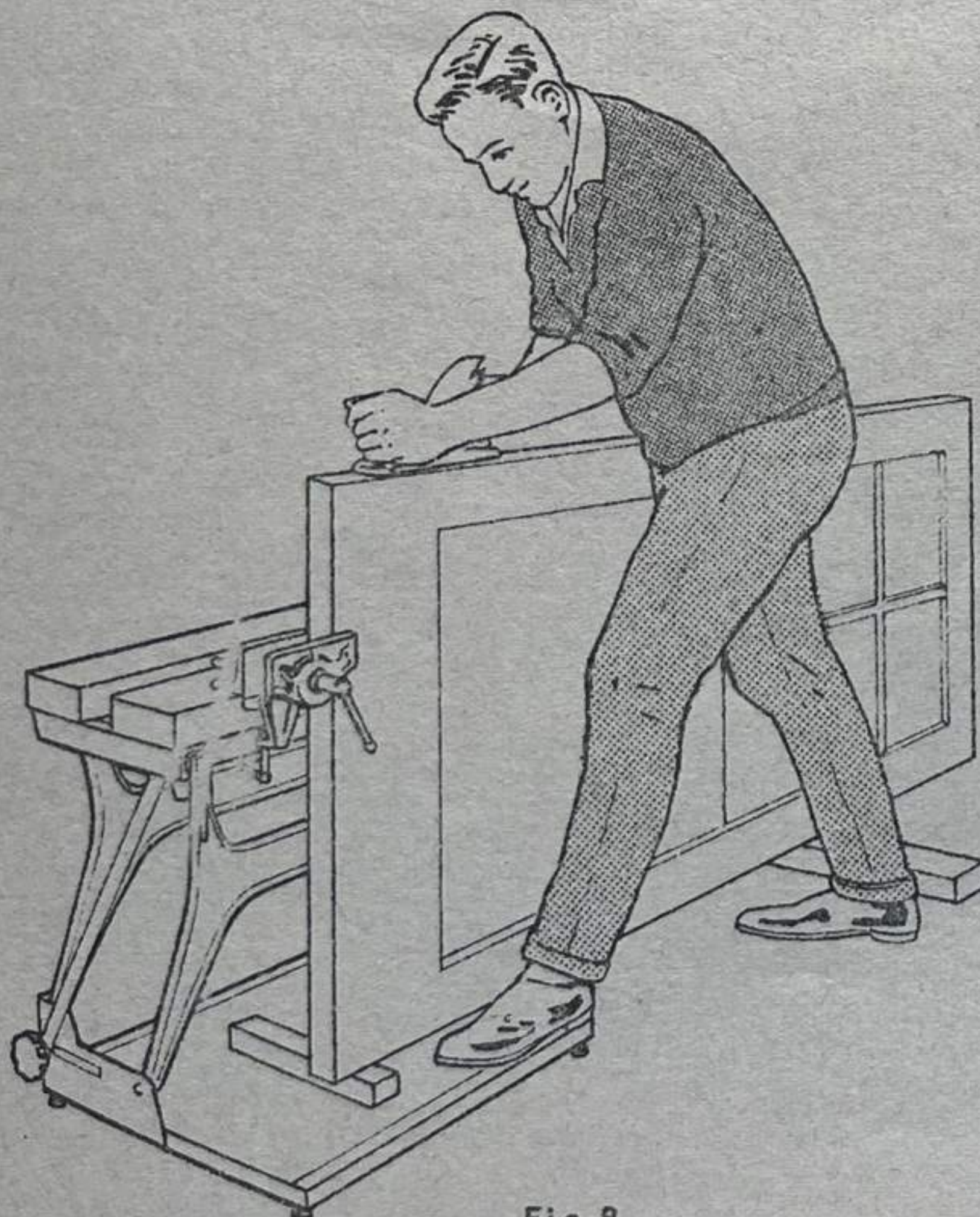


Fig.8

### 7.6 RECOMMENDED TYPES

November, 1968.<sup>5</sup>

Obviously, you should ensure that any vice you intend to buy will fit over the vice bar, which is 1 1/4" (44mm) thick. The following have been checked as satisfactory:

#### RECOMMENDED TYPES

DESCRIPTION	JAW WIDTH	JAW OPENING (w/o linings)	WEIGHT	RECOMMENDED RETAIL PRICE
Record No.51 Junior Woodworker's Vice	6" - 150mm	4 1/2" - 115mm	6 lbs - 2.7 kg.	£1. 18. 0.
Woden No.193 Table Vice	6" - 150mm	4 1/2" - 115mm	6 lbs - 2.7 kg.	£1. 18. 0.
Parry & Bott Clamp Vice No. 1500/C (chrome plated)	6" - 150mm	6" - 150mm	8 lbs - 3.6 kg.	£1. 17. 0.
Parry & Bott Clamp Vice No. 1501/C (steel parts polished)	6" - 150mm	6" - 150mm	8 lbs - 3.6 kg.	£1. 15. 0.
Paramo Woodworker's Vice No.34	6" - 152mm	4 1/2" - 114mm	7 lbs - 3.18kg.	£1. 17. 6.
Rededa No.33	6" - 150mm	4 1/2" - 115mm	6 3/4 lbs - 3 kg.	£1. 13. 0.
Parkinson No.42A Clamp Vice	6" - 150mm	4 1/2" - 115mm	7 1/2 lbs. - 3.39kg.	£1. 16. 0.

### 7.7 METAL-WORKING VICES

Permanently fitted metal-working vices will, of course, prevent you from handling large sheet materials on the worktop - and will, of course, put up the weight and size of the unit proportionately.

They will also prevent use of the standard Wallmate brackets, because, when using these, the worktop surface 'touches' the wall. (The Wallmate brackets can, of course, be spaced off the wall on blocks.)

So, unless you are prepared to accept these limitations, we recommend you fit a clamp-on metal vice - and we make no specific recommendations on suitable 'permanent' metal-working vices for this reason.

DESCRIPTION	JAW WIDTH	JAW OPENING	WEIGHT	RECOMMENDED RETAIL PRICE
Record No. 80 'Imp' Table Vice	2¼" - 60mm	2½" - 65mm	4½ lbs - 2.0 kg.	£2. 6. 6.
Parry & Bott Lightweight Portable Corner Vice 1502	Horizontally 5" - 128mm Vertically 5" - 128mm	3¾" - 95mm	2½ lbs - 1.13kg.	£1. 9. 0.
Parry & Bott Swivel Base Vice 1600	3" - 75mm	3" - 75mm	6 lbs - 2.7 kg.	£2. 2. 3.
Parry & Bott Swivel Base Vice 1601 (with hardened jaws and anvil)	3" - 75mm	3" - 75mm	6 lbs - 2.7 kg.	£2. 6. 6.
Parry & Bott Fixed Base Vice 1620	3" - 75mm	3" - 75mm	5½ lbs - 2.49kg.	£1. 11. 6.
Parry & Bott Fixed Base Vice 1621 (with hardened jaws and anvil)	3" - 75mm	3" - 75mm	5½ lbs - 2.49kg.	£1. 16. 0.
Paramo A-one Table Vice	2¼" - 57mm	2½" - 64mm	4½ lbs - 2.04kg.	£2. 5. 0.
Rededa No. 35	1½" - 37mm	2" - 50mm	2½ lbs - 1.02kg.	£1. 1. 9.
Rededa No. 36	2½" - 62mm	2¼" - 57mm	3½ lbs - 1.7 kg.	£1. 9. 9.
Rededa No. 37 Swivel Base	2½" - 62mm	2¼" - 57mm	4½ lbs - 2.15kg.	£1. 17. 6.
Stanley 702 Lightweight Portable	5" - 128mm	3½" - 88mm	2 lbs - .9 kg.	£1. 8. 6.
Stanley 5702 Lightweight Portable Corner Vice	Horizontally 5" - 128mm Vertically 5¼" - 132mm	3" - 75mm	3 lbs - 1.4 kg.	£1. 15. 6.

Many articles can be held on with G-cramps, sash-cramps, etc. Three typical and useful 'holds' are shown in Figure 9. The 3" (7.5cm) table-vice opening is sufficient to accommodate the 'feet' of bends of most suitably-sized cramps.

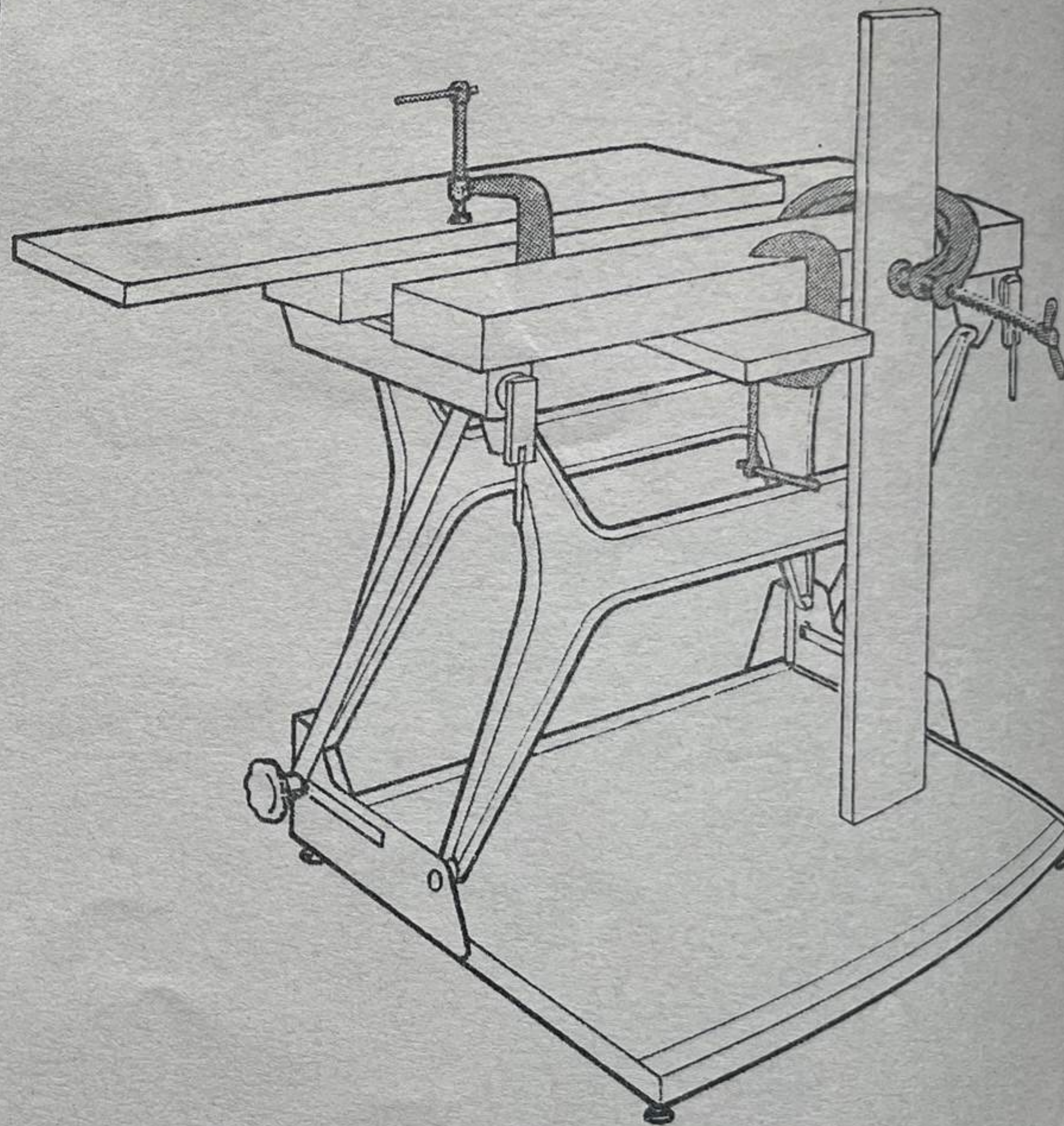


Fig. 9



## 8. GENERAL USES AND FEATURES (see also section 14 on "Special Uses")

### 8.1 SIT-AND-WORK

As stated in the Foreword, when doing small jobs one can very often sit on one end of the Workmate and work on the other. This is, of course, restful and it puts one at a nice height relative to the work surface.

### 8.2 USE THE CENTRE-SLIT

The slit between the table-vice bars is, of course, handy also for drilling—through into, knocking out nails, etc.

### 8.3 GET A TOOL-BOX

To get the full benefit out of your 'portable workshop' one thing you will really benefit from is a means of carrying your tools around with you.

We hope in the not-too-distant future to add to our range a toolbox with folding legs, so that you can put your tools within easy reach and at about the same height as the Workmate itself. Better still, if you can improvise such a thing yourself!

### 8.4 THE WORKMATE WILL HANDLE BIG THINGS

You'll be surprised what large or bulky articles you can support on the Workmate—boxes, cupboards, drawers, tables, frames—even motors and suchlike heavy objects.

Invariably they come out at a better height for working on than they would on a workbench (which usually puts such articles too high for comfort).

### 8.5 CLAMPING OF PIPES AND CONDUITS

Pipes, conduit and round bars up to a diameter of 3" can be quite satisfactorily clamped in the table-vice.

If they tend to rotate when turning loads are applied, wrap each end with a piece of emery cloth.

### 8.6 STANDING ON TO DECORATE

Just a reminder that, being about 6" higher than a chair, much longer and stronger, the

Workmate makes an ideal stand for decorating or reaching high points.

## 9. HAND-SAWING

### 9.1 CROSSCUT SAWING PLANKS BY HAND

This is too obvious to describe—you can hold articles by hand, knee or foot. You can approach the Workmate from front, rear, or the side—and saw down the centre-slit if you want to support the job on both sides of the cut.

You can use a normal bench-hook if you want—or use the combination bench hook/stop described in para. 12.2. (You can even fit a normal bench hook with a peg to hold it firmly in the table vice.)

### 9.2 MITREING

Any mitre-box etc. can, of course, be held in the table-vice simply by fitting it with a block or peg underneath, as described in para. 13.1.

### 9.3 RIP-SAWING PLANKS BY HAND

This is best done as shown in Figure 10.

### 9.4 VERTICAL SAWING BY HAND

Timbers can be held vertically in the table-vice for sawing (vertically)—or other purposes; but obviously they will 'vibrate' or flex if the timber is too tall or thin.

### 9.5 SAWING SHEET MATERIALS BY HAND

Either stretch across the unit as in Fig. 10 (rip-sawing);

or stand at one end of the unit, stretch across and saw down the centre slit or place the cutting line a few inches overhanging the back edge of the work surface;

or get right on top (half crouching, half kneeling) to hold the material down with your own weight whilst you saw.



Fig.10

### POINTS TO NOTE

1. Position large boards carefully so as not to cut the worktop.
2. Use a well-oiled saw on hardboard, ply, etc.
3. Boards cut better when they are allowed to sag or droop on one or both sides of the cut than they do when the board is held absolutely flat or concave—which makes the saw tend to jam.

Because of this, when 'kneeling' on top sawing, it actually helps if you can reach over and around the saw to press down the offcut portion into a drooping position.

### 10. SAWING WITH PORTABLE ELECTRIC SAW

When ripping long timbers with a portable electric saw, it is best to clamp them onto the rear vice bar and work towards the Workmate, moving the clamp(s) and timber as often as you need to.

When nearing the end of the cut, move the timber so that the pieces on both sides of the cut are supported on the worktop, so the 'offcut' portion doesn't tend to bend, snap off or bind up the saw.

An extra trestle for very long timbers can often be handily improvised from a chair, ladder, etc. to advantage.

### 11. TABLE AND BAND SAWS

Mount these as described in Section 13.

11.1 Place the saw nearest the end from which you are working, facing the saw down the length of the worktop for best stability.

11.2 You can easily make an extension to go alongside or behind your normal sawtable to support wider or longer workpieces—mounting this, of course, on the otherwise 'unused' portion of worktop.

11.3 A footswitch, to give you remote control from several feet away, is a good safety item to invest in—it can also save you burning out the saw if it jams up.

### 12.1 PLANING "EDGES" OF TIMBERS UP TO 3" (7.5cms) WIDE

These can be gripped directly in the table-vice. Plane as near as possible to the end from which you are operating to prevent the tendency for the unit to tip—and move the timber along as required.

### 12.2 PLANING "MAIN FACES" OF SHORT TIMBERS

For planing short timbers (up to about 24"), you can make a simple bench stop (and its a hook, too, by the way) as illustrated in Fig. 11.

To grip this item really well, keep the table-vice bars parallel.

The hook/stop can be used in the positions shown in Fig. 12 (for a right-handed user), or, of course, opposite for left-handed use.

A - shows hook/stop in normal use position for planing short, square-ended, timbers. Attach it as near as possible to the end from which you are working.

B - shows hook/stop reversed to take 45° pointed timbers, or short, square-ended timbers diagonally across.

C - shows it in use as a bench/hook for sawing.

In each case the arrow shows the direction of thrust.

This hook/stop can be clipped under the front or rear table-vice bar with 'Terry' clips if desired, where it will always be handy. (See paragraph 14.5 re other items you can keep here, too.)

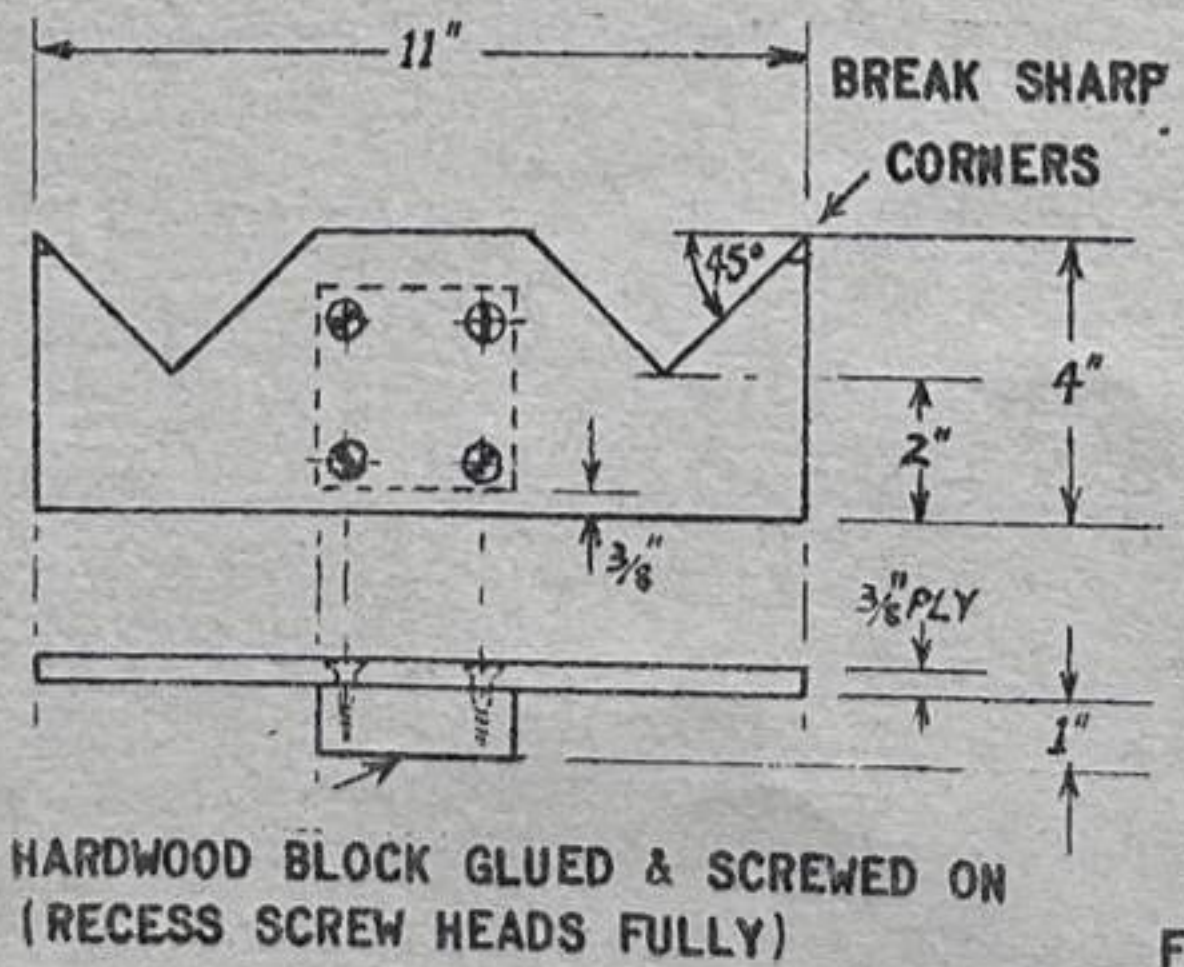


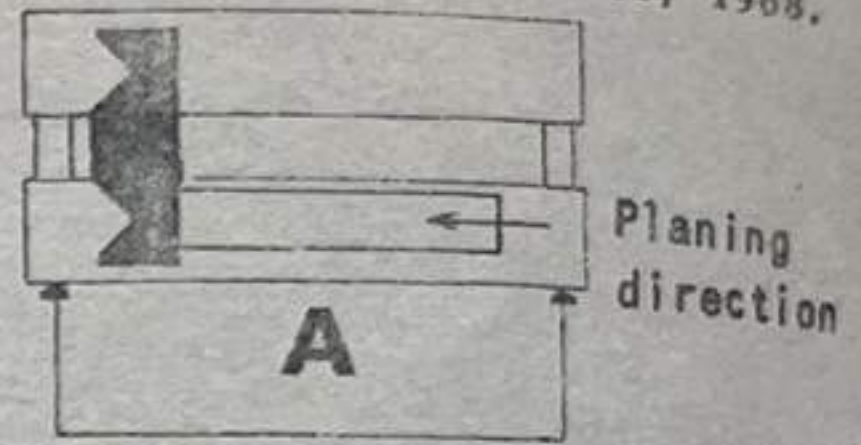
Fig. 11

### 12. PLANING

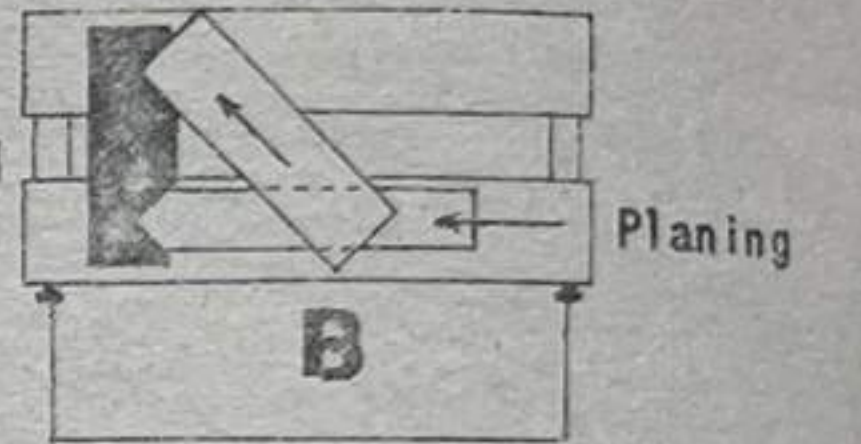
Most people today buy and use prepared timbers, so planing is largely confined to cleaning up of edges etc.

The Workmate is not, of course, primarily intended for regular planing, for which one obviously needs a higher surface; but within its limitations it is of course far better than struggling to plane on tables, chairs, boxes, and other improvised supports.

For square-ended (short) timbers



For 45° pointed pieces or for small square-ended pieces diagonally across



Used as a bench-hook for sawing

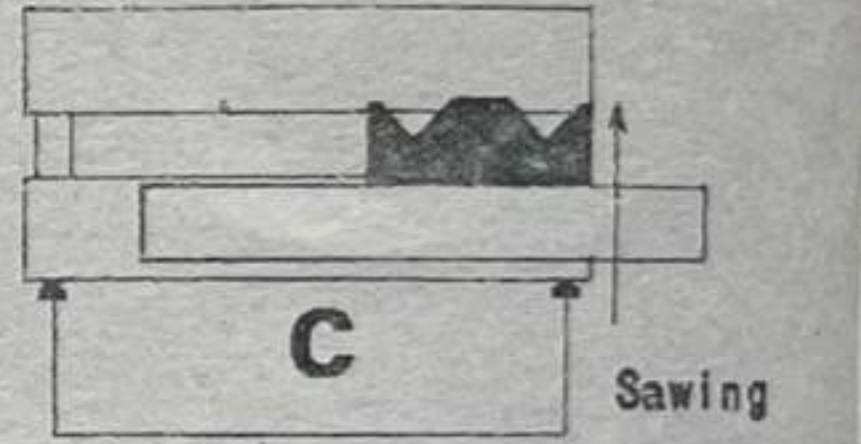


Fig. 12

### 12.3 PLANING "MAIN FACES" OF LONGER AND WIDER TIMBERS

These can either be clamped on, or you can clamp timber strips down the 'outside' edges of both front and rear bars of the worktop, so that, as the table-vice handles are wound, these strips close together to grip on the plank, which is laid between them.

If a lot of planing or cramping of wide timbers is anticipated, it may be worth considering morticing a few 'dog' slots down the front edge of the front bar, and the rear edge of the rear bar—an inch or two in, of course, so as not to risk their splitting open—and to fit hardwood 'pegs' or 'dogs' to give the desired clamping effect.

(These techniques obviously apply to cramping for all purposes.)

### 12.4 PLANING THE EDGES OF LAMINATES, PLY, etc.

Pieces of thin laminates or boards up to 3" (7.5cms) thick of 22" (56cms) square can be dropped vertically down into the table-vice slit as far as the baseboard if desired, and can be clamped with their edges protruding slightly (say only 1/4") above the work surface whilst they are planed or otherwise worked on.

**13.1 ANY TOOL SIMPLY ADAPTED FOR QUICK MOUNTING**

Generally speaking, any reasonably-sized power tool or other article can be clamped on, provided (a) its weight is taken on the table surface, (b) it is fitted with a protruding peg or block which can be clamped by the table-vice. (See Fig.11, showing peg on bench hook/stop.)

Tools can be quickly clamped or released in this way. Tools can also be clamped into the ends of the table-vice jaws, if desired. The average tool, e.g. pillar drill, horizontal stand, lathe, table or band saw, grinder, etc., is best fitted with a rigid timber base plate or block, (1" blockboard or solid timber is good for this); to the underside of which is attached by glue and/or screws a protruding peg or block (of metal, hardwood or softwood) no wider than 3" nominal, i.e. 2 7/8", and no deeper than 1 3/4" (if it is to be mounted over the end metal channels at times).

**13.2 FOR TURNING THE MOUNTING AT 90°**

The block can be as long as you want (the longer the stronger); but, if you want to be able to face the tool or article at 90° different directions at times, then use a square block as on the bench hook/stop (see para. 12.2).

**13.3 FOR ARTICLES USED STANDING**

We suggest that 3", i.e. 2 7/8" wide blocks be used for tools which one stands up at to work, as they mean you need only one or two turns of the table-vice handles from the normal fully-opened position of the table-vice to grip or release the tool.

**13.4 FOR ARTICLES USED SITTING (i.e. with the user straddling the bench)**

For this we recommend blocks of about 2" width, as this means, firstly, that the user's legs do not have to be stretched so far apart (the extra inch being uncomfortable), and, secondly, because it has been found to be more comfortable sitting on a 2" slit than a 3" one!

We don't generally recommend thin pegs (e.g. 1" or less) as they mean the table surface gets rather 'narrow' when in use, and they may make the block or peg difficult to attach strongly to the baseplate.

Remember a footswitch is handy here too, for operating things like lathes, grinders, jigsaws, horizontal stand equipment, etc.

**13.5 TYPICAL RECOMMENDED PEG SIZES**

3" (nominal, i.e. 2 7/8") Square pegs - for tools (usually) used standing; and if 90° angle-ability required	Band Saw Table Saw Bench Hook/Stop Mitre-Boxes etc.
3" (nominal, i.e. 2 7/8") 'Long' pegs - for tools (usually) used standing, but facing in one direction only and requiring strongest grip.	Band Saw, Table Saw, etc.
2" Square pegs - for tools (usually) used sitting, if 90° angle-ability required.	Horizontal drill stand Pillar drill Grindstone Disc Sander Jigsaw or Fret- saw, etc.
2" 'Long' pegs - for tools (usually) used sitting, but facing in one direction only and requiring strongest grip	Lathe, Hobbyists Table, etc.

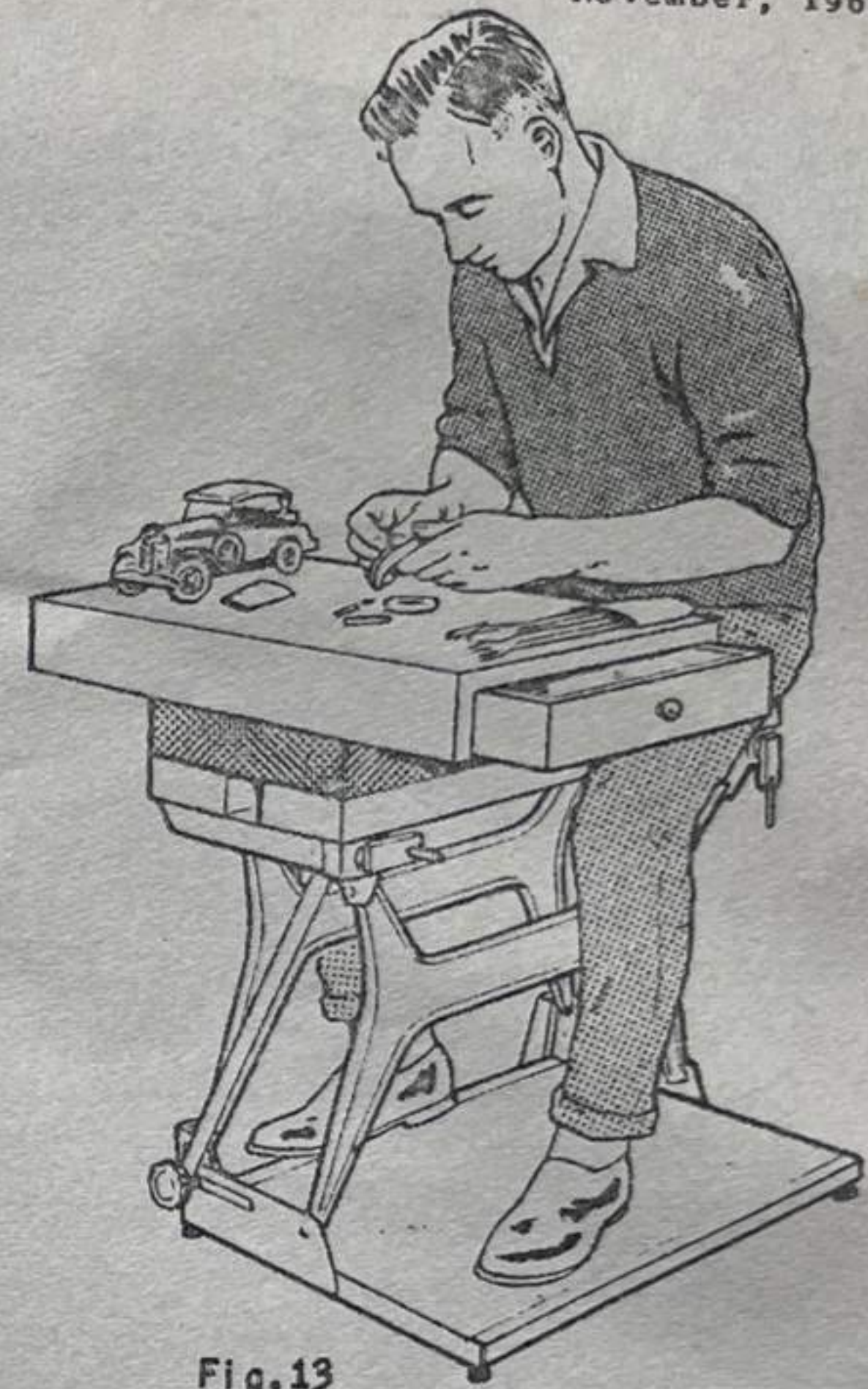


Fig.13