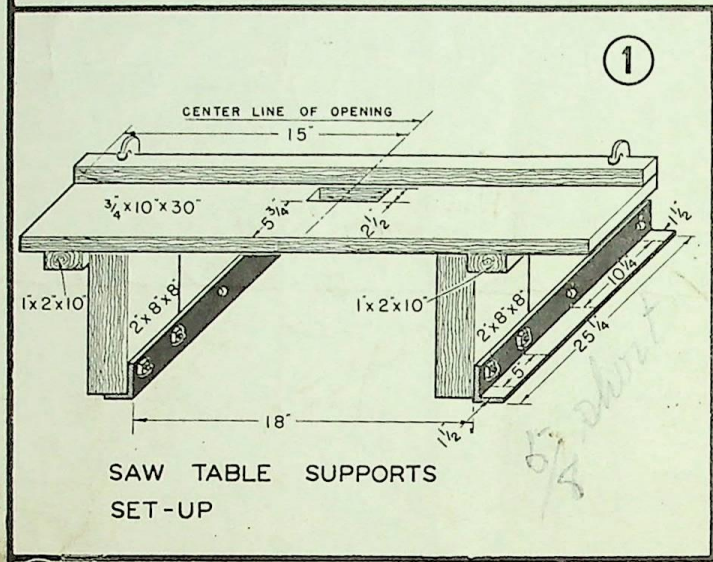
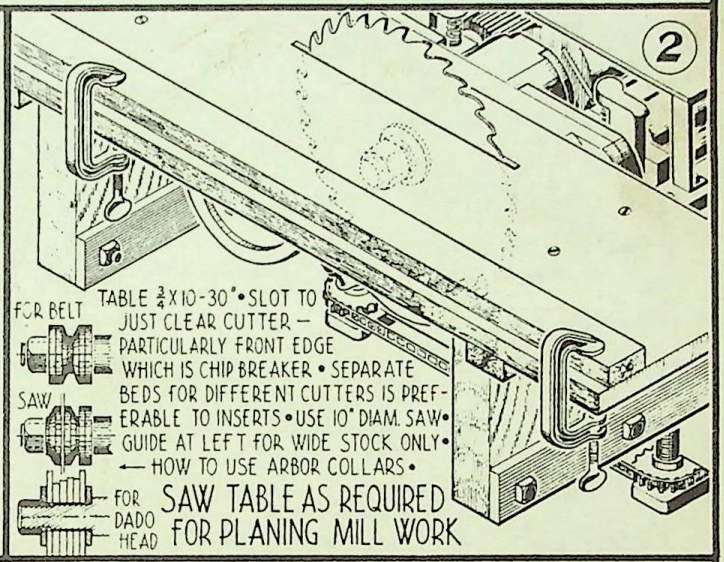
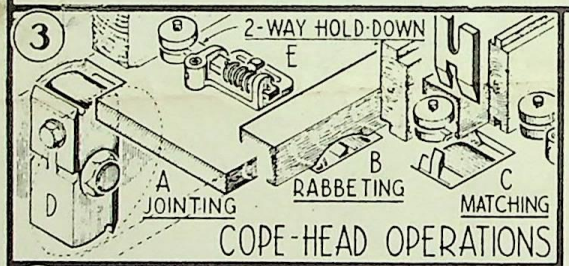
"MULTI-DUTY" ATTACHMENTS

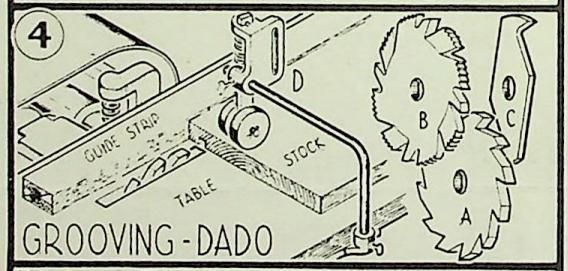
FOR SUPPLEMENTARY OPERATIONS ON BELSAW PLANER

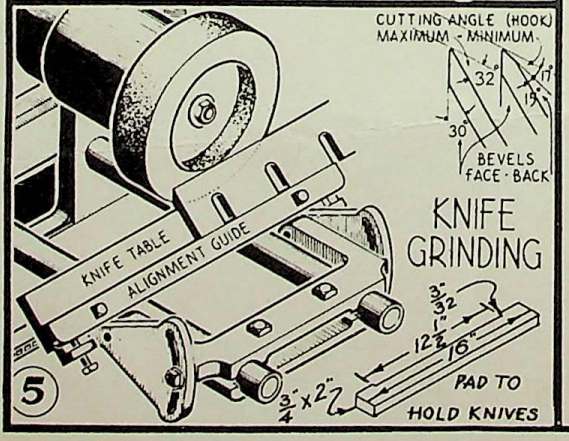
JOINTING·RABBETING·GROOVING·MATCHING-KNIFE GRINDING











SAW TABLE SUPPORTS, Figure 1: Saw table metal parts are supplied as shown, wood parts made by customer. Table top should be smooth and can be cut out for tools you expect to use. Guide should be smooth and straight—generally tacked in place or held with C clamps. Table height is adjustable with planer bed to control depth of cuts.

TRIMMING, Figure 2: Stock for most millwork must first be edged to uniform correct width. By carefully side-dressing saw to give a smooth cut, jointing that edge may be eliminated. Lay straightedge alongside saw and mark cutting line at each end of bed—to measure from for quick alignment when setting guide strip.

JOINTING, Figure 3A: Jointing feature permits S4S work not possible on other planers. Replace two piece belt drive pulley with cope head (972 moulding cutterhead), attach jointing knives and adjust table height for light cut. This same set-up is used for rabbeting (3B); also for matching (3C) and other milling with special shaped knives on same head.

GROOVING, Figure 4: Most millwork operations are various forms of grooving (matching, etc.) and rabbeting (shiplap, etc.). Grooving is usually done with solid plate type cutters. Having numerous cutting edges, they remain sharp longer. Figure 4A shows "common" type grooving saw, for cutting with the grain only; 4B shows "patent" type, for both with and across grain—also has the advantage of smoother side cutting, important in matching, etc. Both types are manufactured in thicknesses from 1/8" to 1/2" by 16ths. The patent type is used as "outside cutters" of a dado head, spaced for wide cuts with "inside cutters" (4C) between.

HOLDDOWN, Figures 3E & 4D: With undercutters there must be uniform pressure of stock against bed so depth of cut will not vary, and against guide so line of cut will be true. This is best provided by the special BELSAW 2-way holddown shown. Its 2-way action is through roller set obliquely and having spring compression.

KNIFE GRINDING, Figure 5: Attachment includes 1) bed tubes, to run through planer body holes; 2) knife table, to clamp on tubes—with adjustment for any angle, and 3) abrasive wheel 5" P D and arbor to go in socket in end of planer cutterhead.

Our planer and jointing knives are regularly furnished with 30° bevel—suitable for most woods. For extra hard wood the planer knives should be back beveled to reduce hook. With the 30° face bevel the hook is 32°; with 15° back bevel it is 17°; the proper hook for hard wood may be anywhere between the two extremes.

Cope head has only 15° hook, so do not backbevel its knives. Keep sliding knife back and forth while grinding, and avoid too much pressure—to prevent overheating metal. Make a wood pad as shown to hold 951 high speed steel knives while grinding; it gives better control and protects your hands. Dub off razor edge after replacing in cutterhead, and resharpen frequently by jointing—until heel becomes 1/32" wide, when must be reground. See instruction with knife jointing tool for full details.

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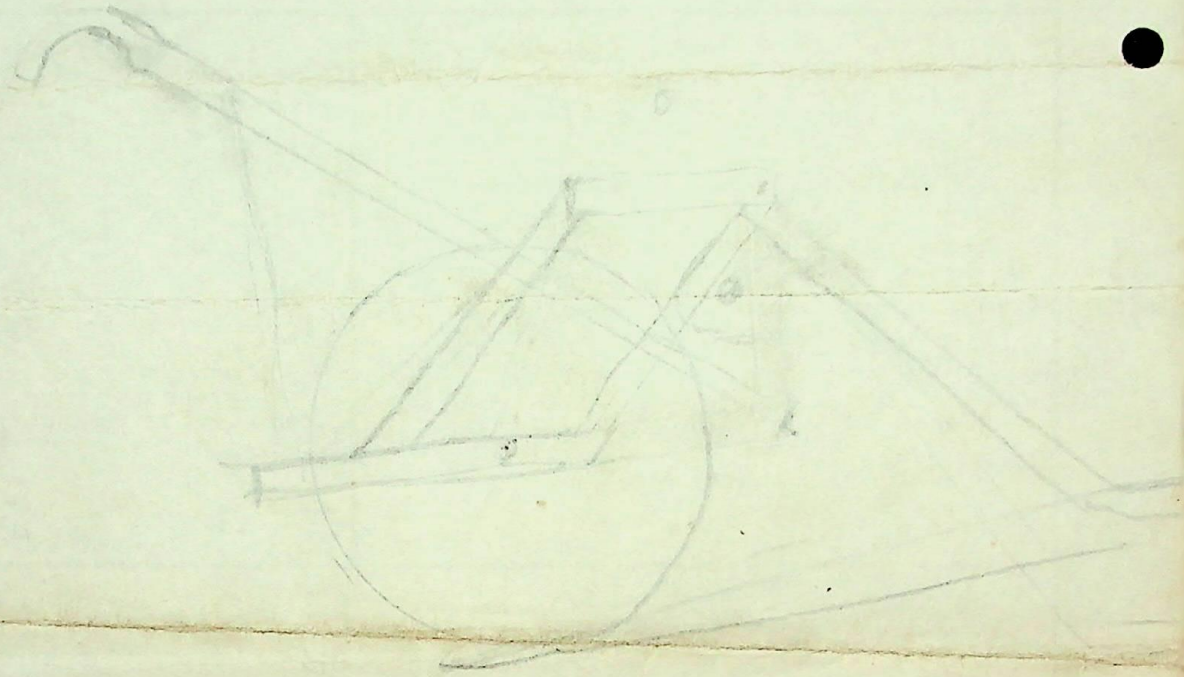
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