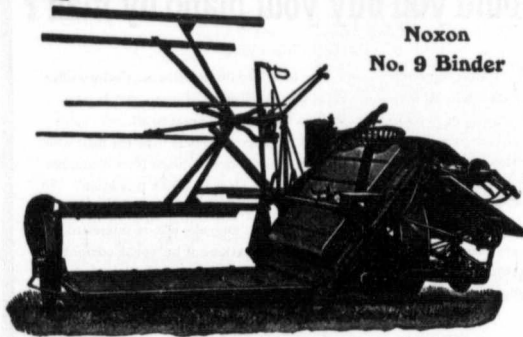


# NOXON

## Binders, Mowers, Rakes



Noxon  
No. 9 Binder

**INDEPENDENT AGENTS AND OTHERS**—Please note **THE NOXON CO.**, an independent firm, wish to make selling arrangements for territory in Manitoba and the West, for Binders, Mowers, and Rakes. Write direct to Headquarters, Ingersoll, Ont. ¶ Get hold of the line that has taken the lead in foreign countries. ¶ Binders 6, 7 and 8 ft. cut. Mowers 5 and 6 ft. cut. ¶ The Binder is the keystone of the implement business. ¶ When you get the **NOXON** you get **THE BEST**. ¶ Our Mowers and Rakes are equally good.

**THE NOXON CO., LTD. - INGERSOLL, Ont.**

by means of a hammer, then by a prying movement the staple is easily drawn. The handle end of the clawbar (fig. 4) may be shaped for use in drawing staples.

**HARNES-REPAIR OUTFIT.**

The tools and facilities required for keeping harness in repair are comparatively simple and inexpensive. Many of the parts of harness, together with convenient supplies with which to make repairs, are now offered at reasonable prices by dealers everywhere. A considerable portion of the repair work on harness can be performed by the aid of tools required for other purposes, but there are a few special devices that are desirable.

**LEATHER PUNCH.**—A good leather punch is one of the most desirable implements both for repair work and for making alterations in harness to fit animals of different sizes. A leather punch made somewhat on the order of a pair of pliers and having four or more punching tubes of various sizes is most desirable. It can be secured for about 40 cents.

**RIVET SET.**—A rivet set is especially desirable for use in connection with solid copper or coppered steel rivets. This (fig. 19) is made of a small piece of tool steel and is provided with a small hole for driving down the washer on the rivet, also a countersink for expanding the end of the rivet.

**RIVETING MACHINES.**—There are upon the market several kinds of lever devices for use in

the insertion of hollow or tubular rivets in leather. These riveting machines are comparatively cheap, but as a rule the hollow rivets do not hold so well as the solid rivets.

**AWLS.**—For the repair of driving harness there should be kept on hand one or two awls to be used in making the holes for sewing with a waxed thread. Awls of this character can be purchased for about 10 cents each, including handle.

**HARNES CLAMP.**—A clamp of some character is desirable for holding parts of harness while repairs are being made upon them. For this purpose a small table vise may be employed or a regular steel or wooden clamp may be purchased. A very serviceable homemade clamp may be constructed from two pieces of wood shaped somewhat like the staves of a barrel; at one end these pieces are dressed off so that they will fit together like the jaws of a vise, and the opposite ends may be hinged together or they may be fastened firmly to the sides of a base block. A short distance from the clamping end a screw, a bolt, a leather strap, or some other simple device may be used to draw the jaws tightly together.

**SPECIAL CONVENIENCES.**

In addition to the outfit of tools obtainable from a hardware dealer, there are a number of special devices that may be made on the farm and which will prove of great assistance in general repair work. Among the more important are the following:

**WORKBENCH.**—A workbench of some kind will probably be the first essential. A good type of workbench is shown in the foreground of figure 21; also in cross section in figure 20. For the construction of this bench there will

be required four boards seven-eighths inch thick, 12 to 14 inches wide, and about 12 feet in length. The length of the bench, however, will depend upon the size of

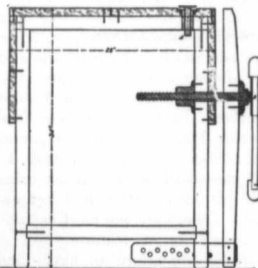


FIG. 20.—Cross section of workbench: A, planing stop; B, bench screw.

the shop or other space that may be available for use as a workroom. Two pieces of 2 by 4 inch scantling, each 16 feet long, will be sufficient to construct the framework of the bench. All lumber entering into the construction of the workbench should be thoroughly seasoned and dressed to uniform width and thickness.

A clamp for holding materials should be constructed from a piece of hard wood and attached by the aid of a carpenter's bench screw, as shown in cross section in figure 20. This clamp should be provided with notches or pin holes at the lower end, so that it can be set to hold materials of any thickness. Along the front of the bench, two or three holes should be provided, into which pins may be set for supporting boards or other materials that are too long to be held rigid by the clamp alone.

A "stop" for holding materials that are to be planed can be inserted in the top of the bench, near the left-hand end, as shown in figure 20. If a regular stop is not employed, its place may be

taken by a small piece of notched board nailed on top of the bench.

**SAWHORSES.**—A pair of trestles, or sawhorses, each consisting of a piece of 2 by 4 inch or 2 by 6 inch timber, about 4 feet in length, supported upon four legs, as illustrated in the foreground of figure 21, are very convenient for working upon while marking, sawing, boring, or chiseling. The sawhorses are an accessory to the workbench and should be constructed at the same time. The cost of materials with which to construct both the workbench and sawhorses should not exceed \$5.

**MITER BOX.**—Among the accessories to the workbench there is perhaps no device that will give greater satisfaction than a good miter box to be used for sawing small wood materials either square or at an angle. For the construction of a miter box, three pieces of board 1 inch thick, 6 inches wide, and 3 feet in length should be selected and nailed together in the form of a square trough, taking care that the nails are driven well out toward the edge of the boards. Vertical cuts are sawed down through the sides to the bottom board to guide the saw when the box is in use. Near one end a cut is made at right angles with the length of the box to be used in making square cuts. For making bevel cuts for a right-angled miter joint, the sides of the box should be sawed down on oblique lines running at an angle of 45 degrees with the length of the box. Two such cuts should be made and should cross each other at the middle of the box, forming a letter X. In marking the box to make these cuts, the square should be laid flat on top of the box so that its corner is

(Continued next month)



FIG. 19. Rivet Set.

kinds of lever devices for use in