

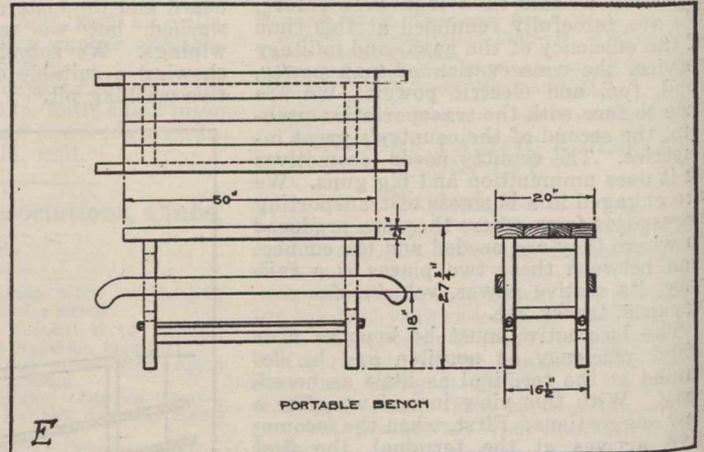
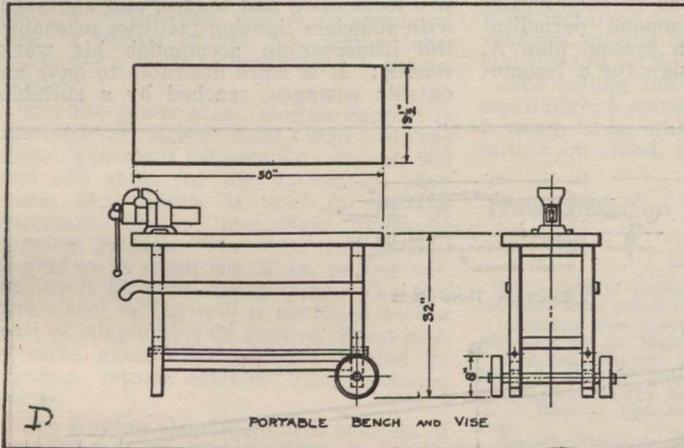
you are putting in a table, make it large enough. In climates where considerable snow is experienced a double drive is desirable, that is, a motor on each end of the table coupled in multiple.

**Toolroom and Tools**—A locomotive house is not complete, unless it is equipped with a toolroom that contains suitable and enough tools to properly and promptly handle the work, located at the locomotive house, so that unnecessary time is not wasted by men in travelling back and forth for tools. Each locomotive house of any considerable size, should be equipped with all of the portable tools, such as

The handling of work reports, etc., is a very important question and suitable facilities must be at hand to properly receive, file and record the work. There should be a suitable place where the locomotive man can, on arrival, make out his report, being careful to fill out the details requested on the form. Plan J is a ground plan of the office building with suitable quarters for the foremen, clerks, register room for locomotive men and locker room. The locomotive man can dictate his report to a slip clerk and this clerk in turn can classify from the locomotive men and locomotive inspectors reports and place

far smaller space than one of a greater surface. The dispatcher's office must be equipped with a telephone system, and an air signal system for the various foremen extended throughout the locomotive house, which will enable him to secure information promptly or call the foremen when they are wanted at the telephone or for other information.

**Specializing Locomotive House Work**—There is a very great advantage to be obtained in specializing the mechanics. They can have suitable tools for doing their individual work and when better equipped can do it more promptly and

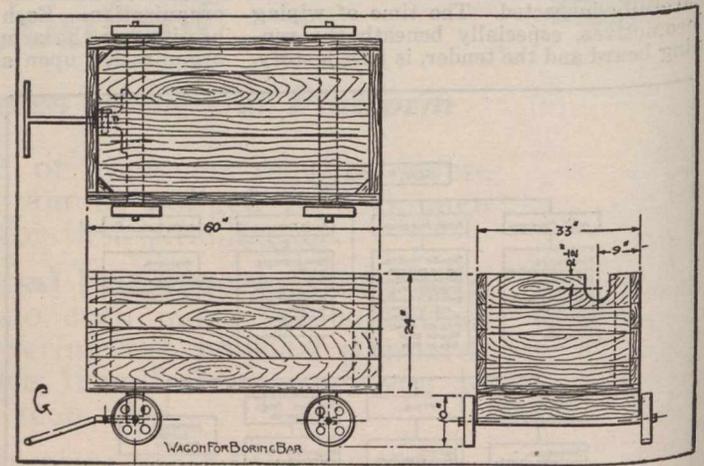
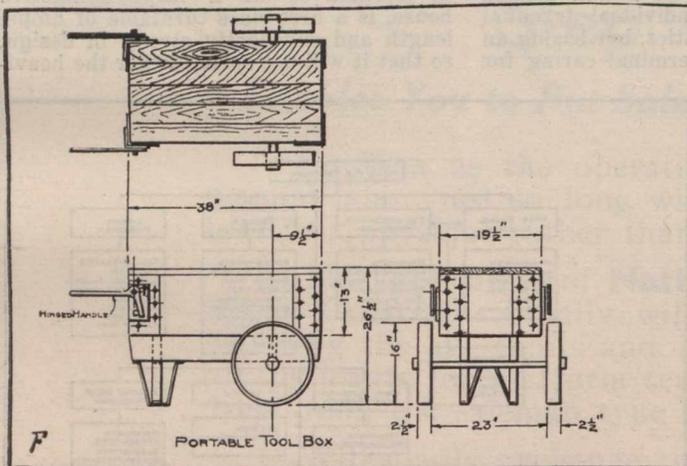


boring bars for cylinder and valve chambers, a valve facing machine, and a crank pin truing machine, and should be provided with portable tool boxes, and portable benches equipped with a vise. Small trucks and wagons should be plentiful and available, as considerable time is lost when these pieces of equipment are not available. Plan D shows a portable bench and vise, plan E a portable bench that is desirable for men working on cylinders, valve motion, air pumps, air reversing gears, etc., and plan F a portable tool box for the individual mechanic that contains all of his tools and can be handled to the

slips ready for distribution to the various classes of mechanics to perform the work. Upon these being signed by the foreman they are returned to the work slip clerk, who in turn checks them off the inspector's and locomotive man's report and then they are filed. The matter of inspection is very important, and the work report books and slips must always be kept in first-class condition. It is highly desirable on a division with any large number of locomotives to have a special man assigned as general inspector to cover the entire locomotive and to see that all requirements of the laws are

with better results. In locomotive houses of considerable size, men can be specialized on passenger locomotives, fast freight or slow freight locomotives as well as switch locomotives. In any large locomotive house, I would suggest that a man be specialized on cab work and one on piston and valve stem packing. The air jobs should be specialized and suitable quarters provided for foremen and organization. The boiler work can be divided and specialized in the same way.

**Water cranes** should be located on tracks leading to and from a locomotive house suitably. With these properly lo-



task that is assigned to him and avoid any lost motion in securing tools for the work to be performed. Plan G shows a portable wagon for a boring bar.

**Information Board**—A board suitably located in the locomotive house, that will give the information as to the status of the work by the various classifications is desirable. Of course, these boards have to be arranged for each individual terminal and should cover all of the operations that are specialized, machine, boiler, air, tender and all other operations. Plans H and I show two of these boards.

complied with.

**Handling of Locomotive Crews**—Essential to good locomotive house operation, facilities for the handling of engine crews is very important. Plan K is a sketch of a circular locomotive and crew board, which serves the purpose, takes up very little room in the office and is visible to the crews from the register room by the means of a glass. On the other side, it is open to the locomotive dispatcher and handy for him to mark up his crews and locomotives. By this means, a large board covers a great number of locomotives and crews and takes up

located, no time is lost in moving locomotives back and forth to give them water, when required. One is desirable for the switch locomotive movement and another for the road and passenger locomotives.

**Blower System**—Every locomotive house should have sufficient steam pressure to properly provide a blower system for getting locomotives hot. Permanent fittings should be made so that each pit in the locomotive house can be coupled by the means of flexible joints, hose or otherwise so that no time will be lost in making these connections.

**Hot Water Washout Plant**—No loco-