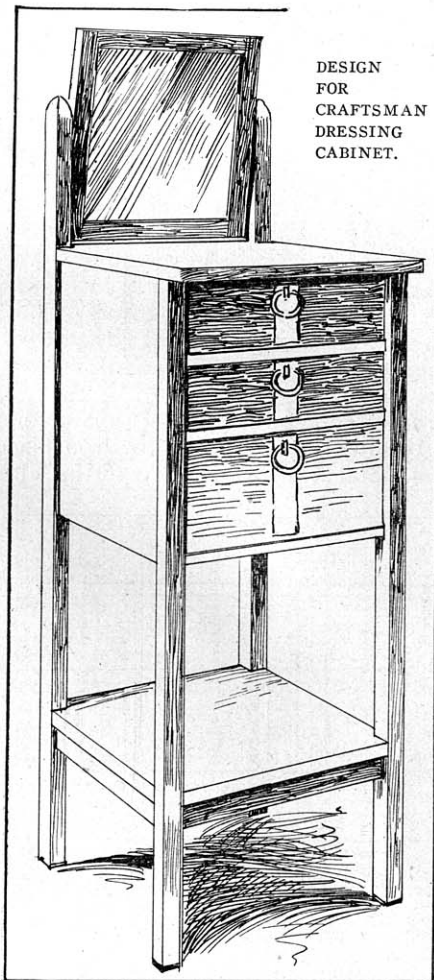


CRAFTSMAN CABINET AND METAL WORK

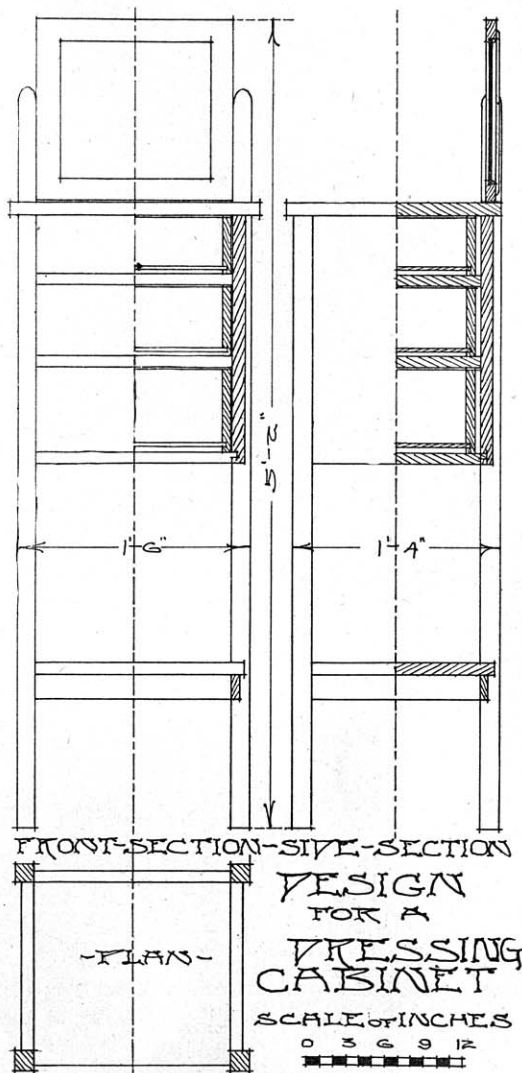
CRAFTSMAN DESIGNS FOR HOME CABINETMAKERS AND METAL WORKERS

THE wall cabinet shown here is a useful piece of furniture for almost any room. In a living room or library it might be used for the storing away of papers and magazines, the lower shelf being large enough for books and the top available for bits of pottery or metal work. In a bedroom or bathroom it would be very useful as a medicine closet, or as a place for putting all the odds and ends that are frequently wanted and yet give a disorderly look to the room if they be kept in sight.

The cabinet is 3 feet 7 inches high over all, and 3 feet 4 inches wide, with a depth of 1 foot 3 inches. The sides are made of



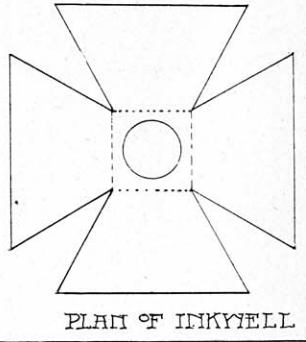
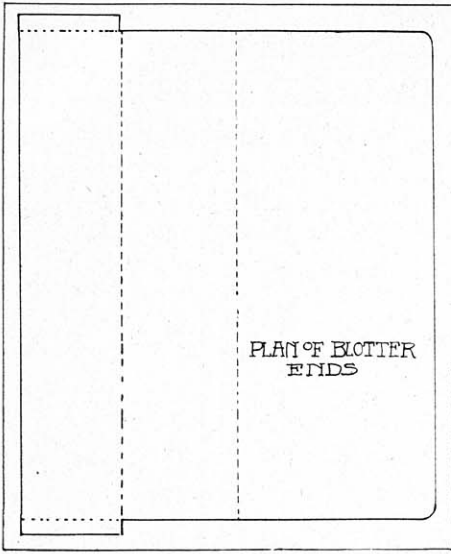
DESIGN
FOR
CRAFTSMAN
DRESSING
CABINET.



$1\frac{1}{8}$ -inch stock, and the shelves of $\frac{7}{8}$ -inch stock. The doors have each one large square panel set in a frame 3 inches wide. The construction is not at all difficult, and will be shown plainly by a little study of the detail drawing. The upper and lower shelves are tenoned through the sides, the tenons being allowed to show as a relief to the plainness of the side-pieces. The tenons of the middle shelf are not allowed to show. The back, which is made of V-jointed boards, is screwed to the shelves, one screw being used for each board. To allow for shrinkage and expansion, these screws are placed in slots instead of in close-fitting screw holes.

The dressing cabinet is very like the old-fashioned shaving stand, and is furnished

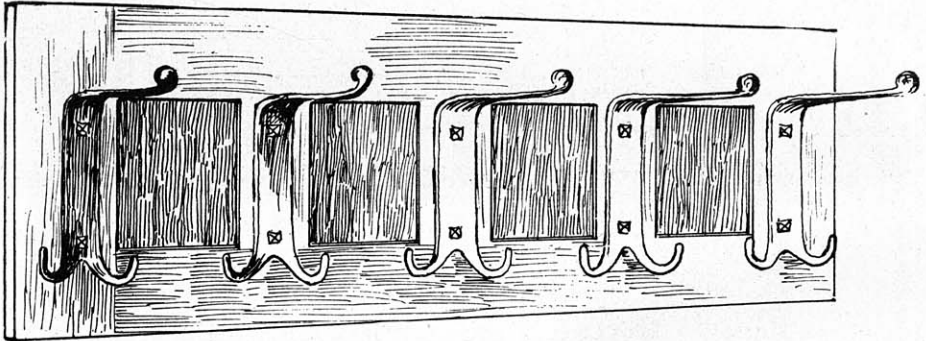
CRAFTSMAN CABINET AND METAL WORK



is made of 1-inch stock, $1\frac{3}{4}$ inches wide. The posts are $1\frac{1}{2}$ inches square, the partitions and the shelf are $\frac{3}{4}$ of an inch thick, and the rail under the shelf is 2 inches wide by $\frac{3}{4}$ of an inch thick.

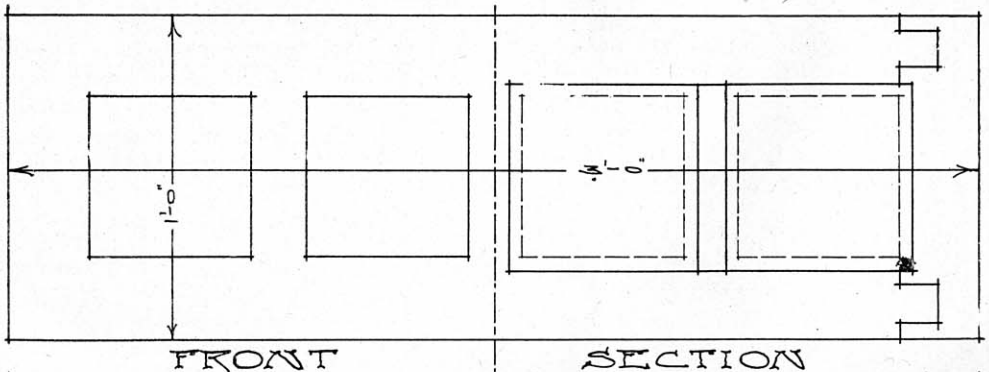
This piece is framed in the usual way, the only difference being that the back and sides are not paneled, a circumstance that makes the piece much easier to construct. It is possible to dispense with panels because the cabinet is such a small piece that solid sides will do equally well and are easier to fit. The partitions are also solid. The mirror is swung upon pins in much the same fashion as we described last month in the case of the cheval

with a small swinging mirror, three drawers and a lower shelf. The stand is 5 feet 2



CRAFTSMAN HAT AND COAT RACK: COPPER WORK. inches high over all, 1 foot 6 inches wide and 1 foot 4 inches deep. The mirror frame

glass, and the drawer pulls are plain round rings of either copper, brass or iron placed against metal straps which extend the whole



DESIGN FOR A HAT AND COAT RACK - PLAN - SCALE OF INCHES

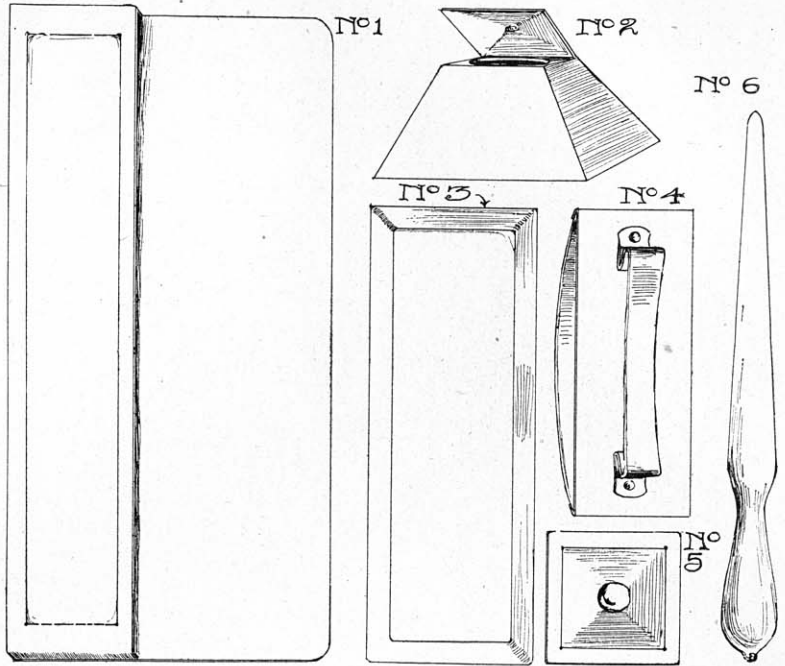
CRAFTSMAN CABINET AND METAL WORK

depth of the drawer.

The hat and coat rack is meant to hang in a hall or vestibule, and is designed in a shape that will look well over a table or below a hall mirror. The frame is 3 feet long and 1 foot 10 inches wide. It is of $\frac{7}{8}$ -inch stock, and the panels are $\frac{1}{2}$ an inch thick. The inside of the frame is grooved so that the panels may be set in, and the pieces are put together by mortising at each corner. The panels are not glued, but are set in loosely enough to allow for shrinkage and expansion without affecting the frame.

The large metal hooks are very easy to make, and the design is sufficiently suggested by the drawing. Anyone used to metal working should be able to forge them of wrought iron or copper without further directions, or they can quite as easily be made of brass if that metal is preferred.

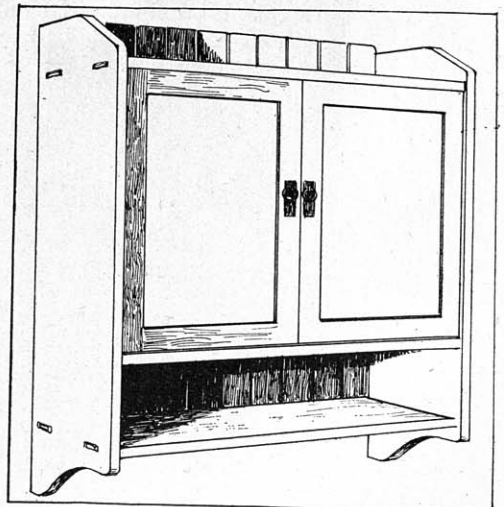
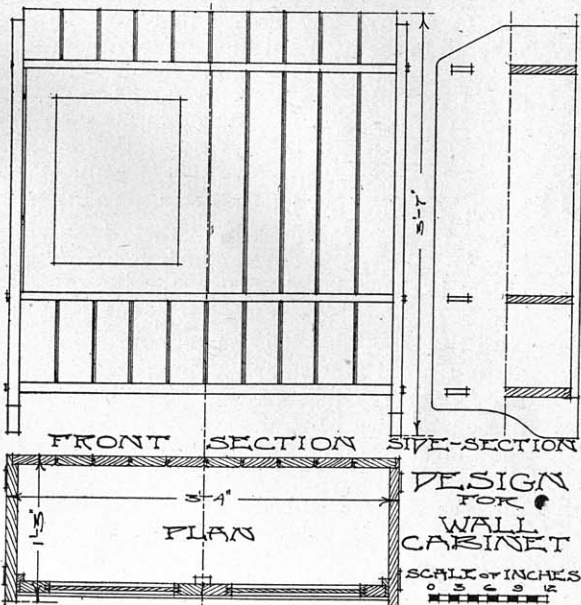
The desk set is very plain and simple in design, and should offer no difficulties to the worker in metals. It includes metal ends



WORKING DRAWING FOR DESK SET.

for the blotter pad, an inkwell, a pen tray, a blotter roller, a paper weight and a letter opener.

The blotter ends are made so that three or four sheets of blotting paper may be laid on the desk and the ends slipped into the metal frames, or the frames themselves can be riveted to a desk pad. The construction of these metal ends is made sufficiently clear by the detail drawing, and they may be made in any desired size. No. 20 gauge



CRAFTSMAN WALL CABINET.

SOLDERING COPPER

metal should be used, and it is best to file all the edges smoothly before bending into shape. A piece of iron, about the thickness of a pad made of three or four blotters, should be clamped to the under side of the metal, and the sides and top brought over and hammered down on this iron mold until it takes the required shape.

The plan of the inkwell is shown in the detail drawing, and the method of bending into shape is illustrated by the drawing of the piece itself. A piece of No. 20 gauge metal should be cut according to the pattern given, and the sides all bent down and soldered together. A flat square of metal serves for the bottom which is soldered into the sides, and a lid made to cover the top can be hinged on. A knob should be put on top of this lid for convenience in lifting it. The inkwell itself is simply a small "school inkwell" which fits into the circular opening left in the top of the metal frame. If amateur metal workers experience any difficulty in obtaining these inkwells, we can furnish them at 15 cents each.

The pen tray is merely a plain oblong tray about 8 inches long and 3 inches wide. The edges are turned up in such a way as to give a broad shallow flare. Like the other pieces, this should be made of No. 20 gauge metal. After it is cut in the desired size a chiseled line should be hammered in about $\frac{3}{8}$ of an inch from the edge. The edges are then turned up at this line, which is cut in deeply enough to allow the edge to bend easily. Care should be taken, however, not to cut the line too deeply, as an extra heavy stroke might send the chisel clear through.

The blotter roller is so simple that only a glance at the illustration is needed to make clear the method of construction. It should be about 6 inches long by $2\frac{1}{2}$ inches wide. The bottom, where the pressure comes, should be made of No. 20 gauge metal, the top of No. 18 gauge, and the handle of No. 16 gauge. The top, of course, laps over the bottom at the ends, leaving sufficient space to slip in the blotter.

The construction of the paper weight is not unlike that of the top of the inkwell. The best size would be about $2\frac{1}{2}$ or 3 inches square when finished. A line should be hammered in about $\frac{1}{2}$ an inch from the edge of the metal, and the center hammered up into pyramidal form and filled with lead. A round knob is riveted to the top to serve as a handle, and a flat metal bottom is soldered on.

The letter opener should be made of No. 16 gauge metal, and the most convenient size is about 10 inches long. The illustration shows the pattern by which this should be cut out. The edges of the blade should be filed down thin all around, and then well polished with an emery cloth until the file marks are all removed. Lastly, the piece should be hammered all over until the surface shows the irregular marks of the tool.

SOLDERING COPPER

A piece of silver solder, a slate slab such as is ordinarily used for grinding ink, powdered or lump borax, and a soft hair brush of some sort are all that is necessary for the process of soldering.

The pieces of metal that are to be soldered must be absolutely free from all foreign matter. To insure this the joint is scraped bright with some sharp-edged tool. Care must be taken to keep the fingers away from the joint as any moisture or greasy substance will prevent the solder from running. The best results are obtained only by being extremely careful as to cleanliness throughout the process. Being sure that the slab is perfectly clean, a little water is put in it and the lump of borax is ground around until the water becomes like cream.

The solder may be obtained any gauge, but about 20 answers for most purposes. After cutting the solder into pieces about $\frac{1}{16}$ of an inch long and about the same width, drop them into the borax that has been ground to give them a coating of borax and to remove any grease that may have adhered to them. Coat the surfaces that are to be soldered with the borax, being careful to get no more borax about than is necessary. Put the parts together and bind them with No. 24 iron wire, not too tightly. The pieces of solder are then lifted with the brush used for the borax or with a pair of tweezers and placed next to the edge that is to be soldered, about one inch apart. The object is then placed on the annealing tray, which answers for soldering as well, and with the blow-pipe it is heated, very slowly at first, until the water has evaporated and the borax crystallized and dissolved, the flame may then be applied more directly and the object brought to a soldering heat. If the heat is applied too quickly, it will throw off the solder; and if heated hotter than necessary it is liable to melt or burn the parts being soldered. ("Copper Work," by A. F. Rose.)