

with a charcoal lining, for a person who has died of infectious disease. The light and simple framework, shown in the foreground, is to be used for a bier.

The great advantage which would result from the adoption of this system of sepulture would be the disuse of envelopes for the body which resist the natural processes by which it would otherwise be resolved into its elements.

Mr. Haden showed clearly the danger of decaying animal matter in the soil, in the midst of a crowded population and pointed out that for the sake of the survivors it was necessary to favour the interment of the dead as soon as possible and to perform the sepulture so as to enable the natural decomposition of the body to take place as rapidly as possible. As regards early interment, he showed, also, a positive statement signed by the chief physicians and surgeons that completely sets at rest the common belief as to the danger of premature interment. On the whole we believe that the solution of this important question will be found in some system similar to this one rather than in cremation, deep-sea burial or any other much dissimilar to the system of interment which, by custom, has gained a hold on the public mind that it is impossible to loosen by argument however powerful.

We were compelled, from want of space, to omit from our last number the descriptions of the Russian Circular Ironclad and of the new offices of the Burland-Desbarats Lithographic Company. They will be found in the present number.

HOMES FOR MECHANICS.

The architectural illustration we give on page 240, is designed to meet the wants of mechanics and working people generally, and is one of three houses intended for a lot having a frontage of 50 ft., each house being 16 ft. 8 in. wide by 30 ft. deep.

There is always a demand for good cheap houses, as real estate men know, and builders and others can not do better than, to invest in this class of buildings, which soon yield a good return to their owners.

The design of one house here given is estimated to cost \$2,000, and is materially different from the common tenements, inasmuch as each is complete in itself and separate, making it really a private residence.

The arrangement of the different floors will be understood by reference to the plans. The aim has been to secure as great a number of well proportioned rooms as possible in a house of such unusually narrow dimensions. The openings have been made large and spacious, as abundance of light and air are great benefits in a sanitary point of view.

GENERAL SPECIFICATION.

The foundations will have rubble wall of stone 16 in. thick. The interior partitions will be carried on girders resting on 12-inch piers of brick, placed at proper intervals. The superstructure is of wood, the frame being sheathed with the "novelty" siding, and having heavy building-paper underneath. The roof to be planked and covered with tin, proper gutters and leaders provided at the rear. Veranda roof also tinued. The ornamental work is effective and tasty, answering the purpose completely, and costing little to execute, 1-inch narrow pine flooring throughout. The walls and ceilings to be well plastered with two coats, the walls to be papered with a neat pattern of light wall-paper for the principal rooms.

Floor beams all 2 x 8 in., 16 in. on centers, furring beams for roof, 2 x 7 in., trimmers and headers, 3 x 8 in., girders, sills, plates, and girts, 4 x 6 in. Studding, outside walls, 2 x 4 and 3 x 4 in. placed alternately, 16 in. on centers; inside walls all 2 x 4 in., 16 in. on centers. Veranda rafters, 2 x 6 in., 16 in. on centers, plates, 5 x 6 in., posts, 6 x 6 in., chamfered as shown, and have caps and bases complete. The ornamental fringe work to be 1½ in. thick, the grain of wood to run vertically.

The balustrade will be 1½ in. in thickness, and have cap molding and base. Ceiling of the roof to be nailed to the rafters, and slope with the same.

Fit up the lattice screen between veranda piers; these piers will be made of solid posts with the bark on, and boxed around; to show 12 in. square. Window architraves 6 in. wide, and caps to windows as shown by the details given. The brackets of the main cornice to be 6 in. wide, and sunken on the face as shown. Corner boards and bulling courses 6 in. wide. All the above outside work to be of clear, well seasoned white pine.

Outside doors to be 3 by 7 ft., and 1½ in. thick, having fanlights overhead; other doors throughout to be 1½ in. thick, 7 ft. high, and 2 ft. 8 in. wide; closet doors will be 2 ft. 6 in. wide. All the above to be provided with a good quality of locks, fastenings, butts, knobs, &c., complete. Sash to be 1½ in. thick, double hung, and have all necessary fastenings complete.

Bases for first and second floors 8 in. high, with 1½ in. molding on top; for third story, 6 in. high, with a beaded top. Architraves for first and second floors to be 6½ in. wide, and molded, those for the third floor and kitchen, 5½ in.; those to windows will stop at the sill. The kitchen and living-room will have a chair-molding running around, 3 ft. high to the top. The stairs to be fitted up on strong carriages, with 1 in. risers and 1½ in. treads, 4½ in. walnut rail, newels, etc., also fit up a step-ladder to the scuttle in the roof. Neat wooden mantels to be made for living and sitting rooms. Outside blinds 1½ in. thick for front windows. Necessary shelves and hooks placed where required in bedrooms and closets. The painting to be two coats of white lead and linseed oil paint. This includes veranda floor, steps, lattice-work, piers, blinds, &c. The outside colors will be in two tints—the body color a delicate French gray, while the trimmings are to be two shades darker. The chamfer and perforated work will be brought out with bright vermilion, sparingly used.

—Manufacturer and Builder.

BROSOWSKY'S HAND PEAT-DIGGING MACHINE.

This is a machine which is in pretty extensive use in some parts of Germany, and several specimens of peat are stated to have been excavated by it. Herr W. A. Brosowsky, of Jasenitz, near Stettin, has been building his peat-digger since 1842; it was probably the first of its kind, and a large number, it is stated 2300, are now at work—principally in north-east Germany and in Poland. It seems to have been the progenitor of the French *grand louchet*. With two men this hand apparatus is stated, by Herr Brosowsky, to be able to bring up from short depths of about 6 ft. nearly 2000 cubic feet in twelve hours. It weighs less than one ton. It consists of a cutter, like the four sides of a box, with oblique edges, which by its own weight, and by means of a crank and rack work, is forced down into the peat to a depth that may reach 20 ft. It can cut only at the edge of a ditch or excavation, and when it has penetrated sufficiently, a spade-like blade is driven under the cutter by means of levers, and thus a mass is loosened, having a vertical length of 10 ft. or more, and whose other dimensions are about 24 in. by 28 in. This is lifted by reversing the crank motion, and is then cut up by hand into blocks of 14 in. 6 in. x 5 in. Each parallelepipedon of peat, cut to a depth of 10 ft., makes 144 sods. It can be used to raise peat from below the surface of the water, rendering drainage in many cases unnecessary. The Mecklenburg moors are now traversed by canals cut by this machine. It is, however, only properly applicable in rather shallow and wet moors quite free from wood and the roots of trees, being more especially of value where a thorough drainage cannot be carried out. On high bogs containing wood it cannot be used, and in any case, beyond a depth of about 9 ft., this hand apparatus is only to be worked with great exertion.

The machine however is very extensively used in Europe and it may be of service to some of our readers to have a detailed description of it.

Fig. 14 and Fig. 26 are respectively side and end elevations of the whole machine, Fig. 36 being a side elevation, and Fig. 46 a plan. It consists of a square box-shaped knife, *a, b, c, d*, the two cutting edges of which *a a*, *a B* and *B c*, each have a different inclination to the horizontal line. The