

13. Chimneys shall not rest upon nor be carried by wooden floors, beams or brackets, nor be hung from wooden rafters. Iron brackets or stirrups attached to wooden construction shall not be used to support chimneys. In frame buildings chimneys shall always be built from the ground up, or rest on basement walls.

14. Chimneys shall be built upon concrete or masonry foundations properly proportioned to carry the weight imposed without danger of settlement or cracking. The foundation for an exterior chimney shall start below the frost line.

15. The walls of brick buildings may form part of a chimney, but the walls of the chimney shall be securely bonded into the walls of the building, and the flue shall be lined the same as an independent chimney. Flues in party walls shall not extend beyond the center of the walls, and their location shall be permanently indicated on the exposed side of the wall.

16. No wall less than 12 in. thick shall be used to support a corbeled chimney; such corbeling shall not project more than 6 in. from the face of the wall, and in all such cases the corbeling shall consist of at least five courses of brick.

17. Flues shall be built as nearly vertical as possible, but in no case shall they have an angle greater than 45 deg. from the vertical. Where flues change direction, the abutting linings at the angle joints shall be chipped to fit closely, and at no point shall the cross section area be reduced. There shall be but one connection to a flue.

18. Not more than two flues shall be permitted in the same flue space, and the joints of any two adjoining sets of flue linings shall be offset at least 7 in. When there are more than two flues in a chimney, at least each third flue shall be separated from the others by a smoke-tight wither or division wall of brick or concrete at least $3\frac{3}{4}$ in. thick and bonded into the sidewalls. Each flue intended for a heating furnace or boiler connection, or for a fireplace, shall be separated from other flues by such a wither. In hollow tile chimneys the wither may be of tile. See Appendix 5.

19. When any single flue area within chimney walls exceeds 200 sq. in., the walls shall be built not less than 8 in. thick and shall have fire clay flue lining as previously specified, but when flues become so large as to render it impractical to secure fire clay flue lining, they shall be lined with fire brick for a distance of at least 25 ft. from the point of intake. Fire brick shall be laid in fire clay mortar.

20. Connections between chimneys and roofs shall be made with sheet-metal counter or cap flashing (copper recommended), arranged to overlap roof flashing and allow for movement that may occur between chimneys and roofs. See Plates I and II.

21. No increase in the wall thickness of chimneys, nor any projecting masonry, shall be permitted within a distance of 12 in. above or below the rafters or roof joists.

22. Irrespective of whether the fuel used be coal, coke, wood, or oil, the minimum area inside of chimney flue linings for various heating devices shall be as follows: for warm air furnaces, or low-pressure steam or hot-water heating boilers, not less than 75 sq. in.; for fireplaces, not less than one-tenth the area of the fireplace opening, but never less than 75 sq. in.; for stoves, ranges, and other forms of room heaters, 49 sq. in. for rectangular flues, or an inside diameter of 7 in. for round flues. In

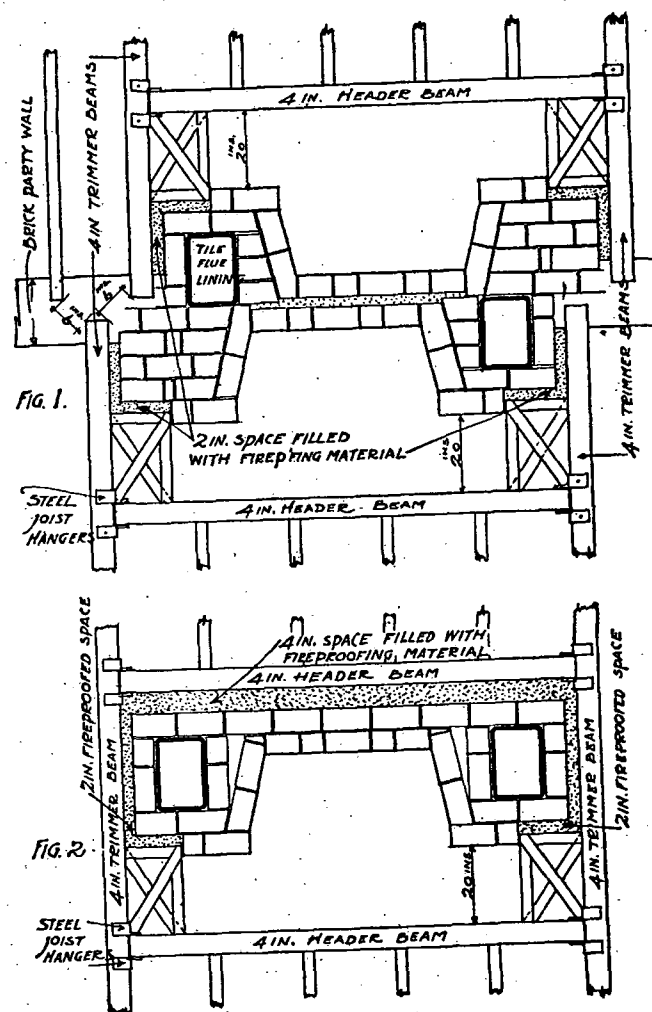


PLATE III.

Fig. 1.—Method for building two fireplaces back-to-back in a brick party wall to secure proper spacing between ends of floor joists.

Fig. 2.—Floor framing around a single fireplace. Note filling between framing and brick-work, which serves both as insulator and fire-stop.