After the trenches have been excavated to the required depth and the concrete beds formed, the alignment of each wall is maintained by placing the quoin bricks in correct position, as described on p. 68, and stretching a line between.

CIRCULAR WORK.—This may be set out by using either (*a*) a *trammel* or (*b*) a *templet*.

(a) *Trammel Method*.—The application of a trammel for the bay window indicated at A is shown at H, Fig. 27. The bonding of this wall is shown in Fig. 15. A trammel is a $\frac{1}{2}$-in. thick board, not more than 6-in. wide, and holed at one end. A $\frac{3}{4}$-in. diameter metal bar is set up vertically in a slab of concrete at the centre of the circle; the length of the bar must be sufficient to reach to the top course of the proposed wall, and must be vertical, as tested by a plumb-rule. Alternatively, the rod may be tightly fitted into a wood peg or post which has been driven into the ground at the centre. The trammel is threaded over and passed down the bar, and the width of the concrete (and footings) and the thickness of the wall are accurately marked on its upper face. The setting out and construction of the semicircular (or segmental) wall are aided by the trammel as it is caused to rotate, and by plumbing. As the brickwork proceeds above the ground level, the trammel, which must be horizontal, is supported at its holed end by a piece of cord which is fastened under it to the bar, the cord being raised as each course is completed.

(b) *Templet Method*.—This is often preferred to the trammel on account of its convenience and the accurate check which it affords. A templet consists of two wide thin pieces of board, everlapped and nailed to each other, as shown at J. The outer edge is sawn and carefully planed to the required curve. A wood tie connects and projects beyond the two ends, and the outer edge of this tie must coincide with the external face of the main wall. Three wood struts or stays are fixed as shown; these make the templet rigid and convenient for handling. The templet is placed as required on top of each course during and after its construction, any bricks not conforming to the curve being tapped in or out until their outer faces correspond to the curve. Plumbing provides a further check on the work. It is most important that the outer edge of the tie is in true alignment with the main wall face each time the templet is used.

GENERAL.—In conclusion, it is most important that the following requirements be observed if best results are to be obtained when setting out facing work :—

1. *The normal face appearance of the selected bond must be maintained over and under openings*. Hence the average length of the bricks should be carefully noted and, as stated on p. 13, Vol. I, the width of each opening should be a multiple of 1 brick for English bond, and for Flemish bond the width should be a multiple of $1\frac{1}{2}$ bricks after 18-in. wide; the combined thickness of the vertical or cross joints must, of course, be allowed for. Thus, for English, English garden wall, and stretcher bonds, the size of an opening may be 9-in., 1-ft. 6-in., 2-ft. 3-in., 3-ft., 3-ft. 9-in., etc., plus the combined thickness of the vertical joints; for Flemish and Flemish garden wall bonds, the width may be 1-ft. 6-in., 2-ft. $7\frac{1}{2}$-in., 3-ft. 9-in., 4-ft. $10\frac{1}{2}$-in., 6-ft., etc., together with the cross joints.

If these dimensions are departed from when the above bonds are adopted, broken bond is inevitable. An example of broken English bond above an opening is shown at N, Fig. 19; note the stretching course immediately over the crown. Unsatisfactory features of broken bond are the non-maintenance of the perpends and unbalanced treatment at the jambs of openings (such as a stretcher at one side and a header or bat in the same course at the other).

2. *The length of walling between openings and the width of external attached piers should be in accord with the average length of the facing bricks*. Thus, for example, broken bond will be avoided if these lengths and widths are multiples of whole bricks (plus the total thickness of the vertical joints) and the bond is either stretcher, English or English garden wall.

It is usual to mark the above position of door and window openings, etc., on the course of common brickwork (generally 3-in, below the ground level) and when constructing the faced work to make certain that the appropriate perpends are vertically under the reveals concerned.

3. *Split courses above arches and lintels* (see p. 21, Vol. I) *and below sills must be avoided*. Therefore the average thickness of the bricks and the bed joints must be taken into account when deciding upon the height of most openings and the construction must conform to the gauge rod (see p. 31, Vol. I) on which the courses are indicated. It is good practice to arrange that a stretcher is the first (reveal) brick in each of the courses immediately above the sill and below the arch. To attain this, it is necessary that the number of courses between the ground level and the sill course shall be carefully ascertained and the bonding arranged accordingly.

Accurately set out brickwork is no more expensive than that which is constructed in a haphazard fashion, and whilst the above preliminaries to actual construction will involve some thought and the expenditure of a little time, the results obtained are well worth while.