ILLUSTRATIONS.

COMPETITIVE DESIGN FOR PROTESTANT ORPHAN ASYLUM, MONTREAL.-DAVID A. BROWN, ARCHITECT.

The design which we illustrate received third place in the competition. The reproduction is from a drawing by Mr. O. Tolhurst, of Montreal.

RESIDENCE OF MR. W. T. MCMULLEN, WOODSTOCK, ONT.-A. WHITE, ARCHITECT.

The face stone work is of Credit Valley brown stone, the cut stone of Ohio buff free stone, and the brickwork of first quality Beamsville red pressed bricks. The roof is covered with Rockland slates. All outside woodwork will be painted a cream color. The hall, staircase and principal rooms will be finished in quartered oak; the bedrooms in clear pine, natural state. The parlor, dining room and two bedrooms to have open fire-places, with tiled hearth and facings.

ORILLIA TOWN HALL AND MARKET BUILDING.—GORDON & HELLIWELL, ARCHITECTS, TORONTO.

The building is constructed of brick with stone trimmings and

The building is constructed of brick with stone trimmings and basement, and a slate roof. The general dimensions are 60 × 106, the tower and staircases projecting beyond this.

The front portion of building on ground floor is utilized for town offices, including a council chamber 40 × 32, town clerk's room and a committee room. The rest of ground floor is de voted to the market, and contains eight butchers' stalls or shops and a general market room for vegetables, &c.

The basement under market is devoted to cellar accommoda-

tion for stalls and a public lavatory.

The cellar under council chamber is used for boiler and fuel room.

In the two circular towers at front are two wide staircases leading to public hall on first floor and to the gallery of same. In the square tower is a private stair to the stage and dressing rooms of public hall.

The auditorium of hall on 1st floor is 56 × 64 feet, and the stage platform recess in rear is 32×25 feet. On each side of stage are dressing and property rooms. Around three sides of hall is a gallery to seat about 270 persons. The main floor of auditorium will seat about 600 persons.

The internal finish in town office portion is hardwood and in the rest of building pine. The walls of market are brick and the ceiling wood. The ceiling of auditorium is an elliptical arch in plaster

in plaster.

NEW LEGISLATIVE BUILDINGS, VICTORIA, B. C.—F. M. RATTENBURY, ARCHITECT.

SKETCHES FROM CHRIST CHURCH CATHEDRAL, MONTREAL.

PRACTICAL CARVING.

A FEW remarks on practical carving may not be amiss at the present time, writes John Keily, of Toronto. Some would-be critics say: Why not use your eye? And a carver who is seen to use a compass or plumb-bob is said to be a mechanical carver.

Now the eye cannot always be depended upon. It seems to be a prevailing fault in drawing a circular curve to make it a flat curve, and a flat curve nearer to a straight line. In the oft repeated egg and tongue moulding, which takes a good carver to make, and which is attempted by every tyro or stone cutter, the chamfer of the egg is invariably on the left side, leaving it full on the right. Its section is not a half circle but the section of a thumb moulding. I observed the same defect on a number of

organ pipes carved behind a figure of music.

I once had to finish an oval shield after a boss carver, who used his eye when roughing it out. Taking a centreline and stepping the compass to the right and then to the left, I found the latter was the control of the latter was t the latter was narrower than the right side: the outline on the left side flat, the right bulbous. A fulness on the right side of spiral bands is also a common occurrence.

In carving a head or mask in stone there is a tendency to splay it off to the left and undercut it on the right. A proper carver when carving the capital of a column uses a plumb-bob on the bell of the cap to get the column line, carrying it well up to give the column vigor; whereas a novice will leave the bell projecting beyond the column line. ing beyond the column line, and the foliage falling out from the astragal to the abacus.

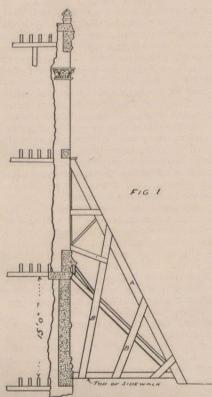
astragal to the abacus.

Dalon, the great French sculptor, when modelling a figure from life, takes a number of fixed points in a mechanical way to determine the proportions of his subject, and then gets in his artistic work. Flaxman says "that Greek sculpture did not rise to excellence until anatomy, geometry and numbers had enabled the artist to determine his drawings, proportion, and motion; truth and the harmony of parts, and the artist endow his statue with life, action and sentiment."

The town of Iberville, Que., has granted a bonus of \$600 per year for ten years to Mr. H. Black, for the establishment of a factory for the manufacture of porcelain sinks and baths. Mr. Dakin will be the manager of the new concern.

SHORING.

Below we show cuts of two examples of shoring which are in use on prominent streets in Toronto. In both these cases side walls are represented by side walls are removed down to the footings about 14 feet below the sidewalk. In Figs. 1 and 2 the principal timbers A are built up of 3 pieces each to a thickness of 7½"×12", and in Fig. 2 the piece marked B is built up of 3 thicknesses of 4" × 12". This timber is footed at the bottom of the



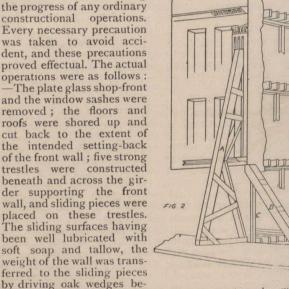
at the bottom of the new basement excavation 15 feet below the sidewalk. In Fig. 2 the shop front is entirely removed on the ground floor, and the corner shored up is supported by the post C, and also by another C, and also by another heavier upright which is omitted from the sketch to make the sketch to make the sketch to make the shoring clearer. The tie pieces are of 2' stuff spiked on both sides of the timbering. The differences in these two examples are mainly in the spread of the lower end of shorings, which is 15 feet in Fig. 1 and is 15 feet in Fig. 1 and 6 feet in Fig. 2, and the way the braces are cut around the cornice in Fig 2. In both in Fig 2. In both height of height of shoring is about 30 feet above the sidewalk.

In this connection we reprint from the Building News the following interesting description and illustration of the methods employed in moving back a brick wall:

back a brick wall : In connection with the widening of Minster street, Reading, it has been necessary to throw a portion of the site occupied by Messrs. Watson Brothers' glass and china warehouse into the street. As Mr. Watson was remarked to the should be street. As Mr. Watson was very anxious that there should be no loss of time, and desired that any new front to his shop which might be erected should be similar to the existing one, the Borough engineer (Mr. Arthur E. Collins, Assoc. M.I.C.E.), designed and carried out an arrangement by which the existing front has been pushed back

front has been pushed back to the desired position. Not-withstanding that a good many persons, who well illustrate the saying that "A little knowledge is a dangerous thing," thought the intended operation a very dangerous one, as an actual matter of fact no more risk was incurred than during the progress of any ordinary constructional operations. Every necessary precaution was taken to avoid accident, and these precautions proved effectual. The actual operations were as follows:

—The plate glass shop-front
and the window sashes were
removed; the floors and
roofs were shored up and cut back to the extent of the intended setting-back of the front wall; five strong trestles were constructed beneath and across the girder supporting the front wall, and sliding pieces were placed on these trestles. The sliding surfaces having been well lubricated with



by driving oak wedges befront wall was then cut away from the surrounding walls and from its supporting brickwork and columns. Screw-jacks were then applied to the slides, and the wall was pushed back into its new position. To prevent the wall from falling forward tween those pieces and the girder supporting the wall.