them. The preparation of the full-sized details for a public building such as a library, town hall, or museum, entails an enormous amount of labour upon the architect, a labour upon which the layman naturally has never paused to consider.

In all classes of building the actual labour involved in the preparation of the plans which the client sees only represents a portion of the work which has been performed by the architect, apart from the hours of thought and study, drawing and re-drawing, already referred to above. cases he will have filled very many pages, possibly several books, with calculations necessary to ensure the stability of the building. The results only of this latter work show upon the drawings as a series of—to the uninitiated—simple divisions of spaces into rectangles and some notes, such as "4-Iin. rods," "2—12in. x 6in. R.S.J.'s," or "6—4in. rivets," etc. It is the knowledge of this which makes the architect so impatient when some uninformed person, disputing payment of a reasonable fee, says that some plan could have been drawn in a week Perhaps it might—but after a month's work.

The drawings are, however, not complete in themselves. They are explained by a document—more or less lengthy according to the size of the project —known as the "specification." The specification is one of the most important instruments in the whole transaction of building. It sets forth under the various trades the work which is to be performed and the materials which are to be provided. supplements the drawings and describes clearly what cannot be shown on them. The writing of a specification which will insure the building being carried out in accordance with the design and the intentions of the architect, is a work requiring considerable skill and a full knowledge of materials and of the various building crafts. It requires, too, the expenditure upon the part of the architect of many hours of labour.

The plans and specifications complete, the architect still has the important work of supervising the erection of the building, although, as has been implied by the foregoing, the work of supervision involves the preparation of some detail drawings. How much supervision can be required by the client? Take a house costing, say, £2,000. For a work of this size the architect will receive as his whole fee the sum of £130. The house will require some six months to complete. It at once becomes clear that it is impossible for the architect to give his whole time, or anything like his whole time, to the supervision of this one work. How much of his time then can reasonably be demanded? The architect is the best judge of that. Obviously this will vary according to many differing conditions, and cir-The architect should, and usually cumstances. does, spare no effort to guard the client against defects and deficiencies in the work of contractors, but it must be remembered that the amount of

supervision which the architect can reasonably be called upon to render cannot always and in every case act as a perfect and absolute safeguard. During the intervals between the visits of the architect an honest contractor may make a mistake difficult to rectify without, perhaps, serious delay to the work to which the owner cannot agree; or a dishonest contractor may of deliberate intent do some defective work, or build in some faulty material, and cover up the same. It may be added, however, to the credit of those engaged in the building trade that this latter is a very much rarer occurrence than is commonly supposed. The remarks of Mr. Matlack Price upon this matter of supervision are worth quoting:—" After all, it should be remembered that the architect's reputation is at stake, not only in the design of the house, for which he is directly responsible, but for the contractor's part of the work, for which he is indirectly responsible. It stands to reason, therefore, that the architect will not wittingly allow a contractor to erect a monument which will reflect upon his professional ability, and much of the client's apprehension regarding insufficent supervision may well be allayed by this reflection." At the same time the amount of time given by the conscientious architect to that part of his work coming under the heading of "supervision," even on a work of small size, would astonish the uninitiated. There are innumerable matters, small and large, referred to him for his determination. Not only do these entail visits to the building, and to the contractor's workshops where certain portions of the work are being made, but various tradesmen engaged upon the building are constantly in and out of his office asking for instructions upon many matters of detail. For all large works the employment of a clerk of works is very advisable. For some classes of work, for example, that in which reinforced concrete forms a part of the construction, his employment is absolutely essential in the interests of safety alone. In every case he acts as a check upon a possibly dishonest or incompetent contractor, or dishonest or careless workmen, and conserves the interest of the owner throughout. It must not be imagined that the clerk of works replaces the architect or renders the latter's supervision unnecessary. The services of the designer of the work is vitally necessary throughout. He still must visit the building and exercise general supervision; from his office must still come the necessary detail drawings; his advice must still be sought—how often one unacquainted with the work of erecting a building cannot imagine. It is he alone who can decide, for instance, if certain steel rods or joists are unobtainable what other may be used in their place. If the owner desires to make some change it is the architect alone who can decide what other consequential changes are necessary for the safety of the structure or to conserve the design. His is still the responsibility.

(To be Continued.)