

entitled. The old method of apprenticeship, in the days when machinery was not the power which it is now, produced superior workmen. The present method, which is largely the result of the introduction of machinery, produces but few good mechanics, and a very large number of botches. If we accept the above as facts—and we must do so—we are to quietly admit the situation and do nothing, or are we like men to make an effort to overcome the difficulties and secure an intelligent and competent body of workmen? The attempt, it is true, must be made in the face of strong opposition from the workmen themselves, but even such opposition will not make the attempt, if it should be made, a forlorn one.

We will consider what might be done to the betterment of one of the building trades, and that the most important of all. The ordinary carpenter has no theoretical knowledge, and we regret to say, but little manual dexterity. His object is not so much to acquire knowledge and skill that he may do good work, as to acquire what will enable him to obtain average wages. That the ordinary mechanic should be thus easily satisfied, is a mystery in this land, where the greater number are working like slaves to acquire a higher position than they now hold. It may be that the retarding circumstances surrounding the workman in the building trades are too great to be overcome except by a long, earnest and sustained effort. That apprentices have not a fair chance to learn any one of the building trades, is an admitted fact. Between the selfishness and indifference of their employers, and the persistent efforts of the unions to place impediments in their road to knowledge, the apprentice has in the present day an uphill fight to make to become a skilled workman. It is no doubt true that one half of them are not anxious to become skilled mechanics, and that if opportunities were given, they would not make an effort to take advantage of them; but as the State is interested in all men having the largest amount of knowledge they can make use of, it is necessary that some means be adopted to enforce the acquiring of mechanical or other skill to enable the individual to earn a living. The industrious should not support the idle, nor should the ignorant workman be supported by the intelligent and skillful mechanic.

We believe that this evil has become so great, that the Government should take hold of the matter. To that end we would suggest that an Apprenticeship Act should be passed, under which all boys desirous of learning trades should be indentured, with a distinct and clearly drawn clause showing how and in what they are to be instructed. The Government should also establish schools to give theoretical training, and all apprentices should be compelled to attend such schools. There should be a reasonable number of examinations to test the knowledge of the students, and at the close of the apprenticeship course the student should receive a diploma stating his proficiency in the different subjects taught. There should also be an inspector to see that apprentices were being given proper instruction in the manual branches of their trades. The employer with whom the apprentice has served should fill out a certificate stating distinctly and clearly his accomplishments and skill, which should be countersigned by the inspector. With such a system as this, every opportunity would be given the intelligent apprentice to become a skillful mechanic. He would also be very much benefitted by the theoretical training he would receive, and which now he has to do without.

SANITARY SCIENCE IN THE HOUSE.

In a lecture on "Sanitary Science in the Home," Mrs. R. H. Richards, who is one of the instructors in the Massachusetts Institute of Technology in Boston, says: "I know no man will dare say it in so many words, and, therefore, it is the more incumbent upon me to do so. I am sure if the much abused architects and builders were to speak their minds they would say that it was the women who hindered them from carrying out the plans which they know to be best. How can a builder survive the scorn which greets him when he proposes to leave all the drain pipes exposed? How can he put hoods over the gas-burners when the artistic sense of the woman who is to occupy the room is offended? How can he convince the women of the family that they should wear thicker clothing in the house in the winter, and not expect to have a whole house made so comfortable that they can wear thin slippers and silk dresses in weather approaching that of the Arctic regions? Does it avail for him to argue with them? Must he not cater to their tastes? And, as they are the ones who live nine-tenths of the time in the house, the man of the family lets them have their own way."



CIRCULAR

OF THE COMMITTEE OF CONFERENCE OF THE AMERICAN INSTITUTE OF ARCHITECTS, THE WESTERN ASSOCIATION OF ARCHITECTS AND THE NATIONAL ASSOCIATION OF BUILDERS ON A STANDARD FORM OF CONTRACT.

Dear Sir,—The Committee of Conference on a Standard Form of Contract, appointed at their last Annual Conventions by the several Associations above named, beg leave to present the accompanying specimen copy of such Contract as the result of their united labors in that behalf, and respectfully ask its adoption by you in your practice.

The object sought to be obtained by the Committee was to obtain a Form of Contract which could be received and adopted generally by architects and builders as a Standard Form, and in which the several provisions necessary to constitute an equitable agreement, as between the owner and the builder, would be incorporated. The Joint Committee were empowered by their respective Associations to prepare and adopt such a Form of Contract, and this work, as embodied in the accompanying printed copy, may be said to be the authorized Standard Form of said Associations.

The action of the Committee in this regard was as follows: After an exchange of views through correspondence, an arrangement was made to have the Committee meet in the City of New York. Accordingly such a meeting took place on the 6th of June, ult., and an organization was effected by electing a Chairman and Secretary. This meeting was adjourned from day to day, daily sessions and one evening session being successively held—until the labors of the Committee were essentially completed. The matter was then referred to a sub-committee, to revise the manuscript for publication. It was afterwards submitted individually to the several members of the Committee, subjected again to another revision, and finally adopted as printed.

In order to preserve the Form from errors, alterations or interpolations, it has been copyrighted. It is the general intention of the members of the National Association of Builders to have it understood that in all cases where proposals for any work are submitted by them, such proposals are made with the understanding that the contract made upon this Standard Form is the one that is to be executed by them upon such proposals.

The Inland Publishing Company, 19 Tribune Building, Chicago, Ill., has been licensed to publish the blanks, and any number of copies, with prices, etc., can be obtained from them on application. The blanks will be furnished at \$1.10 per 100, \$4.25 per 500, and \$8 per 1,000, free by mail or express. Architects can have their names and the consequent pronouns inserted, as they may order, at small additional cost.

The members of the Committee of Conference, appointed by their several associations, are as follows:

Of the American Institute of Architects.	O. P. Hatfield, New York, N.Y.
	Alfred Stone, Providence, R.I.
	F. H. Windsor, Philadelphia, Pa.
Of the Western Association of Architects.	S. A. Treat, Chicago, Ill.
	W. W. Clay, Chicago, Ill.
	F. P. Alexander, Lafayette, Ind.
Of the National Association of Builders.	John C. Stevens, Philadelphia, Pa.
	Geo. C. Pressing, Chicago, Ill.
	John J. Tucker, New York, N.Y.
	O. P. Hatfield, Chairman.
	Wm. H. Sayward, Secretary.
	164 Devonshire St., Boston.

New York, August 8, 1888.

FORM OF CONTRACT ADOPTED BY THE JOINT COMMITTEE OF THE AMERICAN INSTITUTE OF ARCHITECTS, THE WESTERN ASSOCIATION OF ARCHITECTS AND THE NATIONAL ASSOCIATION OF BUILDERS.

This agreement, made the—day of—in the year one thousand—hundred and—by and between—the first part, (hereinafter designated the Contractor), and—the second part of the second part (hereinafter designated the Owner):

Witnesseth that the contractor, being the said part of the first part, in consideration of the covenants and agreements herein contained on the part of the Owner, being the said part of the second part, do covenant, promise and agree with the said Owner, in manner following, this is to say:

1st. The Contractor shall and will well and sufficiently perform and finish, under the direction, and to the satisfaction of—Architect (acting as agent of said Owner), all the work included in the—agreed-to by the drawings and specification made by the said architect, and signed by the parties hereto, (copies of which have been delivered to the Contractor), and to the dimensions and explanations thereon, therein and herein contained, according to the true intent and meaning of said drawings and specifications, and of these presents, in-

cluding all labor and materials incident thereto, and shall provide all scaffolding, implements and cartage necessary for the due performance of the said work.

2d. Should it appear that the work hereby intended to be done, or any of the matters relative thereto, are not sufficiently detailed or explained in the said drawings, or on the said specifications, the Contractor shall apply to the Architect for such further drawings or explanations as may be necessary, and shall conform to the same as part of this contract, so far as they may be consistent with the original drawings, and in event of any doubt or question arising respecting the true meaning of the drawings and specifications, reference shall be made to the Architect, whose decision thereon shall be binding upon the Contractor, and shall be conclusive. It is mutually understood and agreed that all drawings, plans and specification are and remain the property of the Architect.

3d. Should any alteration be required in the work shown or described by the drawings or specifications, a fair and reasonable valuation of the work added or omitted, shall be paid by the Architect, and the sum so agreed to be paid for the work according to the original specification, shall be increased or diminished as the case may be. In case such valuation is not agreed to, the Contractor shall proceed with the alterations, upon the written order of the Architect, and the valuation of the work added or omitted shall be referred to (3) three Arbitrators (no one of whom shall have been personally connected with the work to which these presents refer) to be appointed as follows: one by each of the parties to this contract, and the third by the two thus chosen; the decision of any two of whom shall be final and binding, and each of the parties hereto shall pay one-half of the expenses of such reference.

4th. The Contractor shall within twenty-four hours after receiving written notice from the Architect, to that effect, proceed to remove from the grounds, or building, all materials condemned by—whether worked or unworked, or take down all portions of the work which the Architect shall condemn as unsound or improper, or as in any way failing to conform to the drawings and specifications, and to the conditions of this contract. The Contractor shall cover, protect and exercise due diligence to secure the work from injury, and all damage happening to the same by neglect, shall be made good by—

5th. The Contractor shall permit the Architect, and all persons appointed by the Architect, to visit and inspect the said work or any part thereof, at all times and places during the progress of the same, and shall provide sufficient, safe and proper facilities for such inspection.

6th. The Contractor shall and will proceed with the said work, and every part and detail thereof, in a prompt and diligent manner, and shall and will wholly finish the said work according to the said drawings and specifications, and this contract, on or before the—day of—in the year one thousand—hundred and—(provided the possession of the premises be given the Contractor, and lines and levels of the building furnished him, on or before the—day of—in the year one thousand—hundred and—), and in default thereof the Contractor shall pay to the Owner—dollars for every day thereafter that the said work shall remain unfinished, as and for liquidated damages.

7. Should the Contractor be obstructed or delayed in the prosecution or completion of the work by the neglect, delay or default of any other contractor; or by any alteration which may be required in the said work; or by any damage which may happen thereto by fire, or by the unusual action of the elements, or otherwise; or by the abandonment of the work by the employees through no default of the Contractor, then there shall be an allowance of additional time beyond the date set for the completion of the said work; but no allowance shall be made unless a claim is presented in writing at the time of such obstruction or delay. The Architect shall ascertain and certify the amount of additional time to be allowed; in which case the Contractor shall be released from the payment of the stipulated damages for the additional time so certified and no more; The Contractor may appeal from such award to arbitrators constituted as provided in Article 3d of this contract.

8th. The Contractor shall not let, assign or transfer this contract, or any interest therein, without the written consent of the Architect.

9th. The Contractor shall make no claim for additional work unless the same shall be done in pursuance of an order from the Architect, and notice of all claims shall be made to the Architect in writing within ten days of the beginning of such work.

10th. The Owner agrees to provide all labor and materials not included in this contract in such manner as not to delay the material progress of the work, and, in the event of failure so to do thereby causing loss to the Contractor, agree that they will reimburse the Contractor for such loss; and the Contractor agree that if—shall delay the material progress of the work so as to cause any damage for which the Owner shall be liable (as above stated), the Contractor shall make good to the Owner any such damage—over and above any damage for general delay herein otherwise provided; the amount of such loss of damage, in either case, to be fixed and determined by the Architect, or by arbitration, as provided in Article 3d.

11th. The Owner shall effect insurance on said—work, in his own name and in the name of the Contractor, against loss or damage by fire, in such sums as may from time to time be agreed upon with the Contractor, the policies being made to cover work incorporated in the building, and materials for the same in or about the premises, and made payable to the parties hereto, as their interest may appear.

12th. Should the contractor at any time refuse or neglect to supply a sufficient number of properly skilled workmen, or of materials of the proper quality, or fail in any