

F. Baumann  
43 Pine Grove Ave.

Chicago Dec. 14. 1907

Mr. Glenn Brown

Dear Sir,

The Convention Says have been of great pleasure to me. I have since received the Nov. number of the Inland Architect and therein read with renewed gratification your tribute offered to the Memory of Saint Gaudens.

Kindly excuse an old man's young idea. It refers to our Sky scrapers, which doubtless have become the most prominent feature in modern Architecture. It may be worth while to inquire into <sup>its</sup> origin, and learn as to how and when <sup>emerged the first</sup> ~~this occurred~~, who was the first instigated <sup>to them</sup>, and who had the first building <sup>erected</sup> of the kind erected. It would seem to me that this topic lies within the province of the A. I. A. and may be taken up and settled under rules prevailing.

Probably the Public would be interested in this investigation. What I believe I to know, in regard to the matter I have humbly laid down on the enclosed paper, in order to make - try to - it somewhat interesting, if possible.

I also know of a patent on such construction taken <sup>out</sup> in 1856 by ~~some~~ <sup>and</sup> Minneapolis Architect. When years ago the matter reappeared on my mind

I recovered 3 ground plans and an elevation of the building first <sup>by me</sup> so designed.

It would afford me pleasure to surrender the <sup>plans</sup> ~~plans~~ <sup>whole</sup> ~~case~~ before you as Officer before a Directory. - I have mailed to Mr. J. M. Carriere a letter, with inclosure, with

request to mail to you. In it are ideas as to an ultimate ideal state of the Profession which I expect will engage your attention, - though but, possibly, with a smile

In most friendly disposition

Yours very truly

F. Baumann

addenda

Annex to Construction of Tall Buildings.

The paper was printed in 1884, <sup>The</sup> ~~late~~ <sup>and their business</sup> Printers died a few years thereafter <sup>and</sup> with them their <sup>business</sup>. Exact date ~~cannot be had~~. Early in 1884 Gen. A. C. Ducat (long deceased) Manager of the Chicago Branch to the N. York Home Fire Ins. Co. arranged for a private competition <sup>between</sup> ~~between~~ Mr W. L. B. Jenney, Mr John Addison and myself as to the erection of the Home Office Building nine stories high. Mr Jenney was winner. <sup>so far as I</sup> ~~For what I know~~ <sup>one</sup> ~~none~~ of us had seen another's plans. The first 9 storied building had been built a year <sup>before</sup> ~~prior~~ by Messrs Burnham & Root (destroyed to make room for 1<sup>st</sup> National).

But I, always bent on novelties, had made my plans on an idea, thus far entirely new, of concealed iron construction, <sup>elaborate</sup> ~~find~~ this idea in 21 paragraphs and had them printed before the year ended. The idea was but commonplace, though new ~~it~~, ~~perhaps~~ anybody had his chance, though a nine storied building did not expressly call for it, but when more than 9, when 13 stories were demanded, there <sup>at once</sup> ~~seemed~~ to be no other way of practical success, except through iron construction. Some 12 months after my publication of the matter, the task had come to Messrs Holabird & Roche in designing the Tacoma. Independently on their own account they had laid it out on correct iron construction and completed it in <sup>the</sup> winter 1886-7 as the first of the present kind of tall buildings in the world. Theirs is a glory in fact, mine but one in idea.

The Home, <sup>I consider</sup> ~~for what I believe to know~~, is but ordinary construction. ~~Never~~ <sup>there was no</sup> ~~there was any part of combined iron framework in sight, as carried ahead of the masonry.~~ This essential part of a concealed iron construction nowhere and at no time came <sup>in sight</sup> ~~in sight~~. Mr Jenney <sup>a friend of mine</sup> ~~to whom I was befriended~~, never mentioned to me his share in the glory above alluded to, and I seriously doubt whether he ever believed in it. Dec. 1907

F. V. Baumann

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## IMPROVEMENT

— IN THE —

# Construction of Tall Buildings.



a. There is in life no exception from the laws of competition. It is proper, therefore, to view the matter of building in this light.

b. Occupants seek convenience, *secureness* and *light*; all this, of course, combined with a shine of elegance.

c. The highest success in a happy combination of these four points will lead to the highest possible and most permanent rental.

d. Structures wholly composed of iron would in this light be the most preferable, were it possible to clothe them with proper elegance, and were they proof against neighboring fires.

Hence my

### CONCEALED IRON CONSTRUCTION

OF TALL BUILDINGS.

1. The design is to erect on foundations a firm and rigid *skeleton* or *hull of iron*, and cover the same at once with a proper roof.

2. During the time of erecting such iron structure, or hull, from *within*, the enclosure — be it stone, terra cotta or brick, or any combination of these materials — may be erected from *without*.

3. But the within work would proceed much faster than the without work. While the hull may be roofed within two months, the enclosure might not have proceeded beyond the fourth story.

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4. No delay will be caused by this to a steady progress. Derricks may be set on the roof, for finishing the outward enclosure, in an easy and convenient way. Large, unwieldy and dangerous tall derricks are discarded.

5. During and at the same time, the interior work would be pushed and brought to an end. The erection of partitions, fire places, vaults; arching of ceilings and lining of exterior walls, would be accomplished.

6. Thus all interior work would be done and made ready for plastering, during the time required for accomplishing the exterior parts.

7. This process would make the work far more independent of weather than is the usual process. The erection of the iron hull is, in its nature, a rapid process.

8. The practicability of erecting buildings on Chicago soil, twelve and more stories high, becomes a fact.

9. LIGHT — the most indispensable desideratum with a building procured even in the lowest, most valuable, stories, where otherwise the necessarily broad piers would be a hinderment.

10. The piers may not only be made narrow, but shallow also — 27 inches at the most — and this, again, is a saving of light

11. The iron uprights are to be provided with a series of projecting brackets for the purpose of anchoring and *supporting* the parts forming the exterior enclosure.

12. These supporting brackets to be so arranged as to allow an independent taking out of any part or portion of the exterior lining, which might have been damaged by fire or otherwise.

13. The iron floor girders are securely fastened to the outward posts at both ends. This imparts firmness to the structure. And more, enhances the bearing strength of the girders to at least one and a half times their usual strength.

14. The iron floor beams are fastened to the sides of the girders, and will gain thereby at least 20 per cent to their strength.

15. Vaults, partitions and fire-places may therefore be placed upon the girders without increase to the dimensions of the same, and floor beams may be made lighter than usually.

16. This will enable the expert to save, on the substance of the necessary iron, enough to pay for the extra labor of riveting all parts.

17. A vault 4 feet x 5 feet within, built of porous fire bricks, with walls 9 inches thick, without special (unnecessary) arching, but having light steel plates in its concrete floor and ceiling, will not weigh to exceed four tons.

18. A fire-place built against a partition of light hollow tiles, and with flues specially made of same (fire-clay) material, will not weigh to exceed one ton.

19. Both vault and fire-place may therefore be built at any place, and in any story, upon a girder, without requiring even as much additional strength to iron girders as is gained by the riveting at both ends.

20. The extra cost of iron posts required in exterior walls will be, in an eight-story building, about offset by what is saved on masonry.

21. Buildings with more than eight stories would be — circumstances being equal — the cheapest with my new construction.

The above twenty-one points plead in favor of my

“CONCEALED IRON CONSTRUCTION,”

and show it to be a saving in the four most important items in the construction of buildings, which are: *Light, Convenience, Space, Time.*

Respectfully submitted,

FREDERICK BAUMANN.