

Cast Iron or Terra-Cotta?

by guest writer Nan Jackson

The question “cast iron or terra-cotta?” may strike knowledgeable people in iron and steel preservation as a little ridiculous. Readers may have seen articles in earlier issues of this newsletter addressing the question “wrought iron or steel?” as a reasonable query given how often these materials of common ancestry are not distinguished one from the other in casual descriptions of historic metal bridges and buildings. Unless clued into the distinguishing characteristics of each of these two different metals or the eras in which they were produced and used in various types of construction, it’s easy to file all metal bridges into a folder labelled “iron bridges” or all metal buildings under the heading “steel skyscrapers.”

Cast iron or terra-cotta? How could “fired earth” be mistaken for the iron-carbon alloy we know in our iron skillets and garden furniture? These two materials seem to share little in common aside from the fact that both are formed by human labor of raw materials dug from the earth. Yet there is a good reason to pose this question, especially given the creativity of designers in addressing, for example, their clients’ desire for attractive facades for their commercial buildings without the high cost of carved wood or carved stone. Both cast iron and terra-cotta were good candidates for achieving a high level of pleasing ornamental detail popular in the mid/late 19th and early 20th centuries in our great American cities. Architectural elements made of these materials could be mass produced from a single mold and used in repetitive patterns across a large façade.

The theme of this article came to me by way of a shout of disbelief from Vern’s home office as he researched documents on cast iron for this issue of the newsletter, re-examining photos of the Oliver Typewriter Building from our visit to Chicago last winter and searching online for more information. The Oliver Building was firmly in the “cast iron” folder when Vern found this image and description online:



The distinctive reliefs were made by the American Terra Cotta and Ceramics Company from \$1 a ton clay shipped to Crystal Lake. The designs were by Karl Schneider.

[The image and information above are from Robert Messenger's blog:
<https://oztypewriter.blogspot.com/2014/11/back-to-garden-at-woodstock-celebrating.html>]

Notice the specificity of the information provided about the source of the material in this part of the façade. Does that convince you that this ornamentation is terra-cotta? Notice the description in the plaque designating the building as a Chicago Landmark. Does this convince you that the entire façade is cast iron, including this panel? Is green paint flaking off orange terra-cotta? Is rust showing through green-painted cast-iron?

What if you had to make a judgment based only on a photograph? What details would help you identify the material: carved wood, carved stone, cast iron, terra-cotta -- or maybe something else?



Spoiler Alert: credits for photos (clockwise from upper left)

<https://www.urbanremainschicago.com/products/architectural/ornamental-metalwork/very-rare-late-19th-century-ornamental-patinated-cast-iron-american-radiator-figural-corporate-gift-and-or-presentation-wall-plaque-26078.html>

<https://www.urbanremainschicago.com/products/architectural/exterior-building-elements/carefully-cleaned-and-refinished-historically-important-original-ornamental-cast-iron-louis-h-sullivan-designed-19th-century-gage-building-exterior-facade-stringcourse-section-24865.html>

https://oregonencyclopedia.org/articles/cast_iron_buildings_in_portland/#.XHw_xvZFzD5

[Cast iron column and capital at Smith Block (111 SW Naito Pkwy., Portland, Oregon.)

Photo by Robert Jordan, Bosco-Milligan Foundation, Architectural Heritage Center]

<https://www.kentucky.com/living/article85788777.html>

[Terra-cotta capital on column at Hopewell Museum, Paris, Kentucky]

Maybe one of these days I'll contact the architectural firm responsible for the restoration of the façade of the Oliver Building (whose interior was gutted as part of the Oriental Theatre expansion). I'd ask them if there's both cast iron and terra-cotta in the façade and inquire about who was contracted to do the actual work of restoration and with what materials. Meanwhile, for those of you in the Chicago area, may I suggest that you tuck a magnet in your pocket and, once spring seems just around the corner and the sidewalks are free of ice and the wind is not so cutting, head over to 159 N. Dearborn Street and tell us what you discover. This little article is not meant to answer questions so much as simply to convince the reader that the question "cast iron or terra-cotta?" isn't so ridiculous after all.



https://upload.wikimedia.org/wikipedia/commons/d/dc/Oliver_Typewriter_Building_Front_Door_and_Design.JPG

(photo by Tony the Tiger)

Postscript:

For more information about architectural cast iron and its restoration, here's a link to a "preservation brief" from the Technical Preservation Services of the National Park Service:

<https://www.nps.gov/tps/how-to-preserve/briefs/27-cast-iron.htm>

After reading this brief, you will be asking yourself even more questions as you explore the vast variety of architectural ornamentation in our buildings: is the beautifully restored capital atop that column made of carved stone or could it be aluminum? cast iron or possibly fiberglass? If the question is hard to answer based on unaided visual observation, that's really the point, isn't it?