

9-1961

## A Method Of Orthographic Projection For Delineating And Measuring Gross Specimens

William E. Loechel

Follow this and additional works at: <https://scholarlycommons.henryford.com/hfhmedjournal>



Part of the [Life Sciences Commons](#), [Medical Specialties Commons](#), and the [Public Health Commons](#)

---

### Recommended Citation

Loechel, William E. (1961) "A Method Of Orthographic Projection For Delineating And Measuring Gross Specimens," *Henry Ford Hospital Medical Bulletin* : Vol. 9 : No. 3 , 422-423.

Available at: <https://scholarlycommons.henryford.com/hfhmedjournal/vol9/iss3/11>

This Article is brought to you for free and open access by Henry Ford Health System Scholarly Commons. It has been accepted for inclusion in Henry Ford Hospital Medical Journal by an authorized editor of Henry Ford Health System Scholarly Commons. For more information, please contact [acabrer4@hfhs.org](mailto:acabrer4@hfhs.org).

# A METHOD OF ORTHOGRAPHIC PROJECTION FOR DELINEATING AND MEASURING GROSS SPECIMENS

WM. E. LOECHEL\*

There are frequent occasions when a gross specimen or a series of specimens present extremely valuable details which are easily appreciated when the object can be handled and examined but which seem to defy concise representation when drawn in two dimensions for publication. To sketch such subjects is time consuming and is not accurate to the degree that one might wish. In addition, one's final product is a three dimensional appearing subject, complete with perspective which is definitely not wanted in these instances. The same is true of the photographic effort, especially if the surface is large and receding or if there are several areas in the depth of the single subject that should receive attention.

The author first met with this problem while attempting to produce brain maps and topographical studies of the Sylvian fissure. A relatively simple solution was found which would allow any point (or area) to be delineated as a direct projection upon a common flat surface. The accompanying sketches show the method of delineation. One has simply to position the subject as he wishes and support a piece of thin picture glass above it, as close to the surface of the specimen as possible, being careful to see that the glass is in a plane parallel to the one upon which the specimen rests. After sighting through (or lining up) the two etched points, a fine pen is used to make a small dot on the glass. By continuing to sight and mark, the entire course or contour of the subject will be plotted. If all is correctly aligned, the end result will be a full scale projection of the subject.

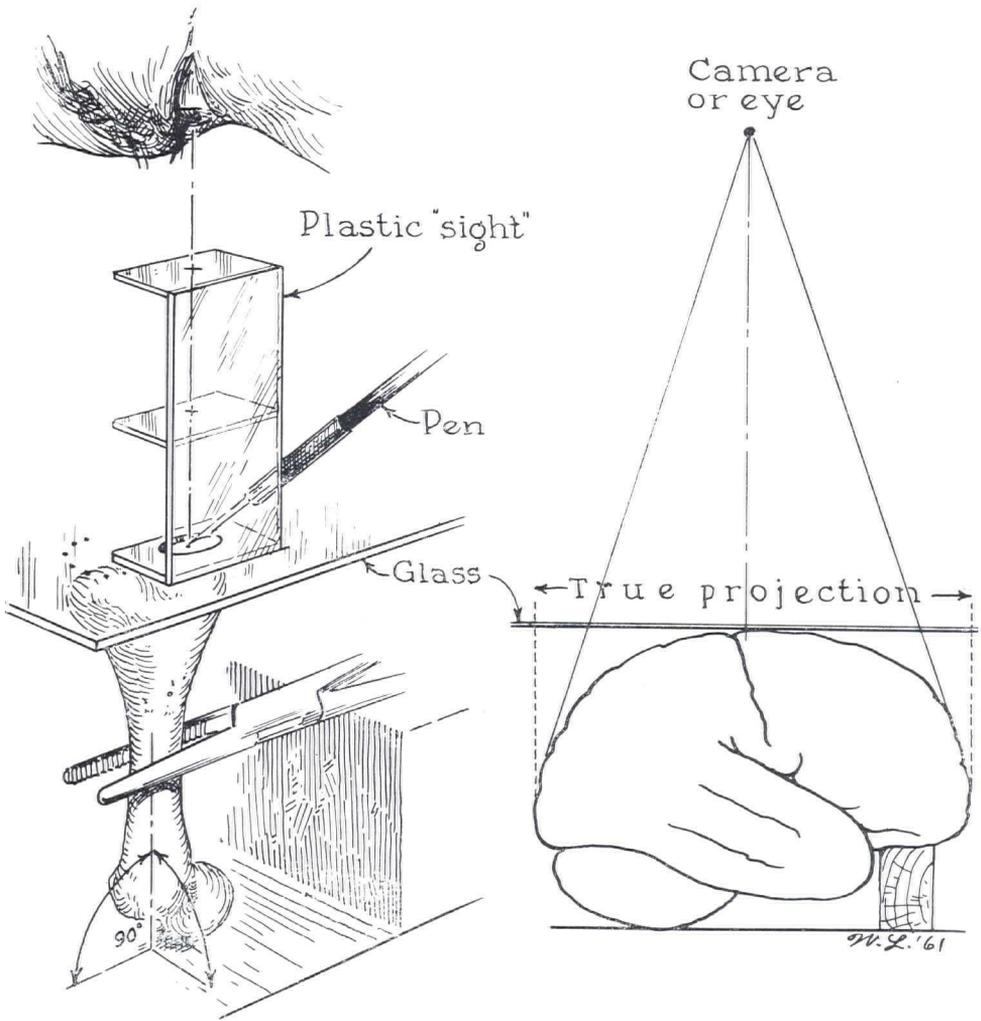
Artistic talent is not a requisite; one has only to fix the axes and planes of his specimen and glass and the delineation becomes automatic. The mark made by the pen should not be visible until the "sight" is moved to the next step along the line. Results are often surprising; this type of delineation is the mechanism for removing the natural tendency to see perspective.

The completed drawing on the glass plate can be traced on suitable paper for publication.

---

\*Director, Medical Illustration Department

Orthographic Projection



Apparatus for orthographic projection