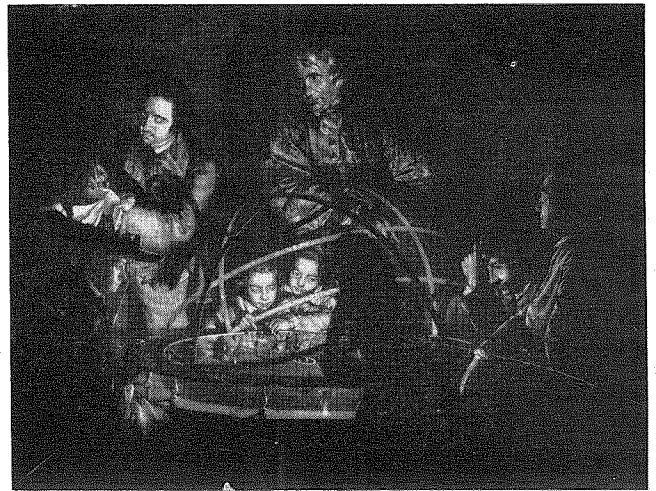


The Air Pump



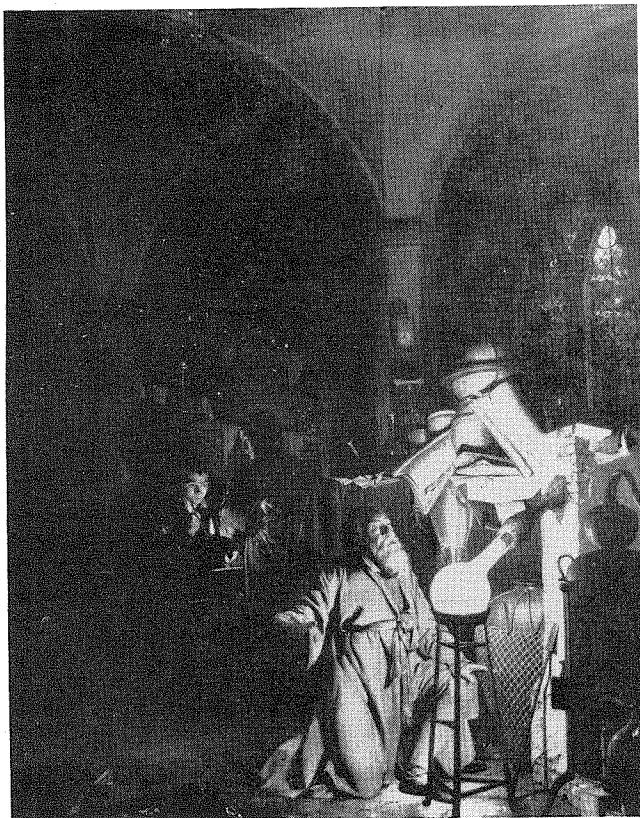
The Orrery

Science in art

Three paintings by Wright of Derby

by ERNEST C. WATSON

The Alchemist



THE THREE GREAT SCIENTIFIC pictures—"The Orrery," "The Air Pump," and "The Alchemist"—painted by Joseph Wright (1734-1797) deserve to be better known to teachers and students of science than they are, for they accurately, as well as beautifully, reflect the state of physical science during the artist's lifetime. "Wright of Derby," as he is often called, was not only a distinguished artist, especially noted for his rendering of artificial lighting effects. According to F. W. Shurlock¹ he was also "an interested and careful student of contemporary science whose knowledge of the scientific details portrayed in his pictures was surprisingly accurate." In a very real sense "the three pictures may be regarded as typical of the state of astronomy, physics, and chemistry respectively in the latter half of the eighteenth century."

The scientific accuracy and interest of these three great paintings have been so happily discussed by F. W. Shurlock that I can do no better than to refer the reader to this delightful paper.¹ Any student who will study the paintings under the guidance of this paper will acquire a new insight into the background and spirit of eighteenth century science.

The reproductions for this article were made from the beautiful mezzotint engravings of the original paintings which were executed during Wright's lifetime by William Pether, Valentine Green and T. Boydell. These engravings are approximately 23 x 18 in. in size and are among the finest examples of the mezzotint art. The mezzotint process, with its affinity to painting in black and white, is well adapted to the reproduction of the unusual lighting effects that are a characteristic feature of Wright's work; but of course it can give no hint of the taste and skill with which the artist "united the blazing reds and yellows of the central glare to the rich brown of his transparent shadows, warmed and cooled these shadows with gleams of red coat and glimmers of blue sash and white dress, and led the eye, untired, from the ruddy glow of the chamber to the cool night outside."

1. "The Scientific Pictures of Joseph Wright," *Sci. Progress* 17, 432 (1923).
2. W. Bemrose, *The Life and Works of Joseph Wright, A. R. A.*, Commonly called "Wright of Derby" (London, 1885).