

Action of Oxygen upon Anatomic Elements.—Bert has been studying the toxic action of oxygen under high tension. He finds, by the indirect method of air confined under pressure, that the injurious influence of oxygen upon air-breathing vertebrates begins when its tension corresponds to a pressure of five or six atmospheres. The analysis of the gases contained in arterial blood shows that under this tension the coloring matter of the globules is completely saturated with oxygen, and that gas begins to be dissolved in the sanguine plasma. If the compression is long continued, the solution of oxygen becomes diffused through the tissues, and the organic oxidations are diminished, leading to an immediate reduction of the temperature of the body.—*Comptes Rendus*. C.

Pasteur Prize.—Dumas has announced the foundation of a special prize by an anonymous contributor, in the following terms: "The works of M. Pasteur have opened new processes to medicine. A prize of 6000 francs will be decreed, in 1880, by the Academy of Sciences, to the person who shall have made the most useful application of these works to the healing art."—*Comptes Rendus*. C.

Microscopic Mineralogy.—A. Michel Lévy has contributed to the *Annales des Mines* a valuable paper upon the use of the polarizing microscope, for the determination of mineral species by small sections. The investigations of Rosenbusch, Fouqué, and Descloiseaux, although all embraced within the last decade, have already become classical. Lévy tabulates their conclusions, and gives a complete mathematical analysis of the angles of extinction presented by the sections of a zone, together with a practical application to the study of the principal monoclinic minerals, and of some triclinic feldspars. C.

High Furnaces.—M. L. Greever divides smelting furnaces into two classes, which he calls *trapu* (squat), and *elancé* (long). In the *trapu*, the height does not exceed three times the length; in the *elancé*, the ratio is four or more; and he admits an intermediate class, the *ordinaire*, in which the ratio is between three and four, and generally about 3.5. He compares the productions of various furnaces in England, Styria, Corinthia, America, Sweden, Germany, and France, drawing conclusions unfavorable to the *elancés*, which have increased so largely within the last quarter of a century.—*Annales des Mines*. C.