procure themselves a momentary respite from suffering, indulge in free potations. We can no more escape the operation of a morbid agent by rendering our bodies insensible, than we can avoid danger by shutting our eyes. In both cases, the shock which prudence and presence of mind might have averted is rendered inevitable.

We shall now consider some of the occupations which expose to intense heat.

IRON FOUNDRY, which consists in fusing iron in a furnace and then passing it into moulds, requires in some of its departments an exposure to a very great degree of heat. In order to be convinced of this, it is sufficient to consider that the highest summer heat is about 95° Fahr., a degree of heat which in this climate is not often exceeded in the shade. Now iron fuses only at a temperature estimated at about 20,000; and where the casting is not large, the workman dips out the fused metal with a ladle from the furnace, and pours it into the kettle from which it is transferred to the mould. The quantity removed at each time is as large as can conveniently be managed; and this process is continued until a sufficient quantity is removed for the casting in question. In this mode it is not unusual to decant for one casting a ton of liquid iron; an operation which may perhaps require about 15 minutes. The mere muscular effort required for performing this, is by no means despicable; and when it is considered that this is exerted at the very mouth of a furnace heated to ten times the degree required for boiling water, it is obvious that it constitutes no very agreeable occupation. The temperature of the atmosphere in which the workman stands, is often as high as 130—150 degrees; scarcely any clothes can be borne, and the sweat is profuse. Yet from this extreme heat it is often scarce possible to avoid passing immediately to the temperature of the external air, which may be at or below the freezing point; and this is done by all fearlessly, without any sense of danger from the exposure. No particular precautions are used in regard to dress, either by those employed as above mentioned or by others of the workmen. At first the sudden variations of temperature are attended with some inconvenience, and give rise to catarrhs and slight rheumatic affections. In those accustomed to the employment, these effects are not produced; and so far as this circumstance is concerned, the men remain free from disease. They have not, however, the appearance of very robust health; and where the trade is carried on to a sufficient extent to afford opportunity for judging, do not appear to be very long-lived. In the moulding department, considerable dust is produced. The intense light to which the eyes are exposed, has a tendency to produce weakness of that organ. Burns from the fused metal occasionally happen, but are not frequent.

LOCAL APPLICATION OF CROTON OIL.

BY C. ROBBINS, M.D.

[For the Boston Medical and Surgical Journal.]

THE value of Croton Oil, its effects on the system when introduced into the stomach, and the peculiar circumstances and forms in which it should

be administered, are well understood by the faculty. A case of *mitmosis* recently presented itself to me, in which obstinate constipation was one of the prominent symptoms, and yet it was not a case in which the croton oil was admissible. Medicine of any considerable bulk was also inappropriate, since the irritability of the stomach was so great as to reject it *instantly*, and the patient had already reached the twentieth day since the last evacuation from the bowels. Under these circumstances I was induced to try the effect of the oil externally applied, although I had never known or heard of a case in which constipation had been overcome in this manner. One drachm of the oil was accordingly rubbed over the abdomen, but it produced no apparent effect on the bowels. Its only operation was on the skin, bringing out a very copious eruption of minute pustules, which dried away in a very few days, without producing any considerable inconvenience. These pustules were smaller than those usually excited by the antimonial ointment, and attended with less acute local inflammation or soreness. Facts of this kind should be recorded, since they may one day be turned to account in diseases requiring external irritation.

Boston, December, 1832.

Monthly Notice of New Publications.

Human Physiology; Illustrated by numerous Engravings. By ROBLEY DUNGLISON, M.D., Professor of Physiology, &c. in the University of Virginia. 2 Vols. 8vo. Carey & Lea, Philadelphia. 1832.

DR. DUNGLISON is well known to the medical public as the author of a copious dictionary of medical terms—a work displaying great erudition, and one which, we doubt not, will take the place of all similar publications in the hands of the profession in this country. The present work, which is somewhat more attractive in its subject, affords a new proof of the author's uncommon zeal and diligence in that branch of study to which he has devoted himself. The work is a complete treatise on the various functions which subserve the life of the individual and the propagation of the species, accompanied with all the descriptive details which are necessary to the elucidation of the subject, and farther illustrated by numerous wood cuts, placed side by side with the letter press which refers to them, and giving a concise but faithful representation of the various organs of the human body. In considering the various subjects embraced under the comprehensive title of Human Physiology, as understood in modern language, Dr. S. seems to have omitted nothing of importance that was to be found in the works of his predecessors, and has shown himself to be well acquainted with the labors of all the most distinguished physiologists of the age, both in England and on the continent of Europe. He has moreover enriched his work with much valuable information,