

solves, that produces the irritation. Hence two causes of offence are to be removed—the carbon particles which convey the irritant by adhesion and condensation, and the free vapor which accompanies the particles. The moistened cotton-wool I knew would arrest the first, fragments of charcoal I hoped would stop the second. In the first fireman's respirator, Mr. Carriek's arrangement of two valves, the one for inhalation, the other for exhalation, are preserved. But the portion of it which holds the filtering and absorbent substances is prolonged to a depth of four or five inches. On the partition of wire-gauze at the bottom of the space which fronts the mouth, is placed a layer of dry wool, then a layer of charcoal fragments, a second thin layer of dry cotton-wool, succeeded by a layer of fragments of caustic lime. The succession of the layers may be changed without injury to the action. A wire-gauze cover keeps the substances from falling out of the respirator. In the densest smoke that we hitherto employed, the layer of lime has not been found necessary, nor is it shown in the figure, in a flaming building, indeed, the mixture of air with the smoke never permits the carbonic acid to become so dense as to be irrespirable. But in a place where the gas is present in undue quantity, the fragments of lime would materially mitigate its action.—*Medical Press and Circular.*

---

## OBITUARY.

We regret to announce the death of Dr. Wm. Tempest of this city, on the 8th ult., after a short and severe illness, arising from an abscess in the region of the bladder. He was born in Halifax, England, and settled in Toronto in 1842. In 1845 he received his license from the then Medical Board, and practiced for some time in Trafalgar, and subsequently in Oshawa. In 1861 he obtained the Degree of M.B., University of Toronto, and soon after commenced practice in this city, where he has remained since that time, and where he has built up a comfortable practice,—made many friends, and endeared himself to all who knew him well, by his kindness of manner and warmth of heart.

In 1866, during the Fenian invasion, his son, a member of the volunteer-corps, who was then about 21 years of age, fell at Ridgeway in defence of his country. This was a severe blow to