

VENTILATION.—As the better ventilation of every apartment in every dwelling-house, especially those appropriated as sleeping apartments, would be highly conducive to health and comfort, permit me to describe a simple means by which this may be effected, at little expense, in every apartment of our dwellings, as also in shops, schools, hospitals, factories, churches, and other public buildings, as well as in those buildings also appropriated to animals of various kinds, and equally applicable in old as in new buildings.

A farmer, on a small scale, who had made a cellar his dairy, found the milk and butter would not keep sweet, owing to some offensive smell in the cellar, of which, for a long time, he in vain endeavoured to find the cause. The farmer then turned his mind to making a vent or escape for this offensive air; to effect which he made a hole in the ceiling large enough to receive a funnel, the large end or mouth of which he turned downwards, and well plastered to the ceiling, so that air could escape only through the funnel; to the other end he attached a long small tube, which he conveyed along a joist above the ceiling, and out through the main wall of the building. To the great joy of the farmer, the cellar or dairy was thus rendered perfectly free from smell, and the milk and butter would keep sweet.

Curiosity, however, induced the farmer to mount a ladder and apply his nose to the small tube outside the building, when he found issue from it an excessively offensive stench.

It has lately been discovered that the flesh of animals, which are killed in the middle of the night, will keep much longer than it will when they are killed in the day time; and it is, for this reason, preferred by those who prepare potted meats. This circumstance is very singular; for it proves that the flesh is fittest for keeping when taken from the animal at the time when the respiration is slowest and the temperature of the animal lowest. It is well known that the flesh of animals which have been hard driven will not keep at all. After what has been stated, we need not be surprised, as this quickens the respiration and heightens the temperature.—*Dumas' Chemie.*

Dumas, in his "Applied Chemistry," has urged upon the French Government to undertake the formation of canals, for the purpose of irrigation, on an immense scale, throughout the country.—He thinks this would at once render France independent of any foreign supply of corn and cattle. He attributes the richness of England's pastures, and the beauty of her cattle, entirely to the numerous canals she possesses.—*C. E. D.*

TEMPERATURE OF THE GROUND.—"A few years ago a merchant at Yatsutsk, in Siberia, of the name of Scurgin, began to sink a well, but found the ground frozen so hard that he was about to give up the attempt. Admiral Von Wrangel, the celebrated traveller, advised him to proceed until he came to the bottom of the icy ground; he did

so, and sent to the Academy of Sciences, of Saint Petersburg, a report of his proceedings. He had to dig through 382 English feet before he arrived at the loose and unfrozen soil; the whole of the vast intermediate mass of earth being at a temperature below the freezing point, and almost uninfluenced by summer heats; the temperature was about 18° Fahrenheit, 14° under the freezing point; or, in the language of gardeners, 14° of frost, at a few feet below the surface of the ground," and gradually increased with the depth, until the freezing point was attained, at about the depth mentioned above.

THE TUSSAC-GRASS.—At the last meeting of the Philosophical Society of Glasgow, a magnificent living plant or tussac of the *Dactylis capitata*, or tussac-grass, was exhibited from the island of Lewis, where it had been successfully cultivated by Mr. Smith, of Deanston, who superintends the improvements, which, with equal enterprise and munificence, the proprietor, Mr. Mathieson, is introducing into that fine island. In the absence of Mr. Smith, the plant was ably described by Mr. William Gourlie, jun. The seed of the plant, obtained from the Falkland Island, in which the tussac grass is indigenous, was sown in the Lewis, in the spring of 1845, in pure moss, simply derved, with a small quantity of guano thrown on the surface. Thirty-seven plants have come to maturity, two of which carried seed last year. They grew in an enclosure fourteen yards square, with a turf wall six feet in height, situated within thirty yards of the sea. The specimen now exhibited measured three feet in circumference close to the ground, and four feet in height, many of the gracefully drooping leaves being from five to six feet in length. The plant is scarcely less luxuriant than in its native island. The tussac-grass was first brought into notice in this country by Sir William Jackson Hooker, in his notes on the botany of the Antarctic Expedition; seeds and plants of the grass having been sent home by Dr. Joseph Hooper, the botanist to the expedition, and who possesses no small share of the scientific skill and enthusiasm of his distinguished father. In the Falkland Islands it grows in peaty soils, close to the sea. The wild cattle and the horses of these Islands are extremely fond of it, and will even eat dry house thatch when composed of it, the basis of the culms being grateful from their sweetish nutty flavour. There can be no doubt that is the most valuable plant which has been introduced into the country for agricultural purposes for many years, and it is eminently deserving of the attention of proprietors who have waste peaty land on the western shores and Highland lochs. The specimen exhibited to the Philosophical Society is now deposited in the Botanic Garden, where, we are sure, Mr. Murray will be glad to point out to the curious.—*Glasgow Constitutional.*