

must be added together, and divided by their joint number for a mean circumference; the square of which must then be multiplied by the decimal .07058, and this product by the height up to the eaves, and one-third of the rise of the roof, added together, and this divided by 27 (the calculation being made in feet) will give the product in decimal yards.

THE CAUSES OF HILL AND DALE.—"The existing inequalities on the surface of the earth, and particularly the origin, the form, and the distribution of valleys, have been the subject of much controversy and very conflicting opinions among geologists. Yet after all allowance has been made for volcanic action, or the formation of islands, hills, and mountains, by the sudden eruption of concentrated, local, subterranean fire,—for plutonic action, or the upheaving of mountain ranges, and the diversified elevating of broad tracts of country, by the power of diffused subterranean fire,—for disruptive action in the crash of the avalanche, the fall of the landslip, and the devastations of the earthquake,—and for diluvial action, in the breaking up of continents, the dispersion of islands, the throwing down of hills, the filling up of hollows, and the general physical revolution of the world by the general deluge,—all classes of geologists admit that a very large amount of the existing contour of the earth, and especially those features and lineaments of it which constitute the ramified basins of great rivers, must have been fashioned by the action of running water. In whatever condition the world was left by the general deluge, whatever effects it retained of the previous great volcanic and plutonic agencies, and whatever results it exhibited of the universal catastrophe which had just transpired, it cannot be imagined to have possessed the flowing outlines of valley and the nice adjustments of river-course which now characterize it, but must be figured to the mind as abounding in asperities, rugosities, spreading tableaux, and sharply angular masses, which only the erosions of the atmosphere, and the action of running water, could reduce to the existing condition of beautifully curved surface, and conveniently intricate division."

EXTRAORDINARY ACCIDENT.—On Friday week, as two ladies were riding out in a retired lane at Mattishall Burgh, Norfolk, they observed a cow running towards them in a state of great excitement and apparently mad. On its approach, they discovered a child attached to its tail by the hair, which was wound round its body. They instantly gave the alarm at the nearest house, and assistance being rendered the cow was secured. The child was, however, found to be quite dead. The body was much bruised, and the head cut and battered in a dreadful manner. An inquest was held on the body on Saturday, when it appeared from the evidence of a child five or six years old, who was near the spot at the time of the occurrence, that deceased, (whose name was Thomas Ircson, aged 10 years, son of a labourer residing in the parish,) had tied the cow's tail, which had a great length of hair, round his body, saying that he was going to have a swing, and the cow started off, dragging the deceased after it. A verdict of "Accidental death" was returned.

AWFULLY SUDDEN DEATH FROM THE STING OF A WASP.—On Saturday morning, the 19th instant, one of those awfully sudden dispensations of Providence, occasioning most afflictive bereavement, and as if intended as a further memento of our frail state, took place here. Mr. Robert Haffenden, sen., of the Stream Farm, a very healthy man, and peculiarly so in appearance, who was known for many miles round as a respectable farmer, went, after partaking of a hearty breakfast, into his garden and partook of a ripe plum, in which afterwards proved to be a wasp, which stung him in the throat. He immediately told his daughter he thought he had been stung, and very quickly finding that the swelling of the throat was rapidly increasing and stopping the passage, means were immediately resorted to to procure honey and vinegar as a remedy (some of which he took,) and a medical man was sent for, but so rapid was the effect of the fatal virus, that at about 8 o'clock, or in about three-quarters of an hour it is presumed after the infliction of the wound, and about an hour before medical aid

could be procured, Mr. Haffenden fell a corpse near the front gate. Truly may it be said, "In the midst of life we are in death." Mr. H. was very highly respected by all within the circle of his acquaintance, and his decease will be sorrowfully felt by all, particularly by those in his employ, and by more than ordinary severity by his whole family. It is a striking coincidence that the deceased was stung by a wasp on the tongue about twelve months ago.

OVINE SAGACITY.—A very remarkable instance of the sagacity of the sheep occurred lately at Ballochmyle Bridge, Mauchline:—A flock of sheep were pasturing in a field adjoining the above bridge, and being pursued by a dog three of them attempted to cross it. As some workmen, however, are still employed about the bridge, they were deterred from this course and sought refuge on the *bottling course* on the outside of it. The bottling, we may state, is about eight feet from the summit of the parapet wall, and projects from the main building about eighteen inches.—It is nearly round, the flat space left not being above four inches broad. At the abutments, however, the bottling is fully two feet broad, and not rounded to the same extent. On this the poor sheep entered at one end of the bridge; and, following each other, began their perilous journey. Before they had proceeded far, however, it was evident they were conscious of danger; for they lay down occasionally, while their plaintive bleating was distinctly heard in the vale below. No one could lend assistance, as by the slightest motion from above, the sheep would doubtless have fallen into the abyss beneath. They continued their course at intervals, now walking slowly, and now lying down. The caution they displayed, however, was most striking; and though their feet were observed occasionally to slip off the outside of the stone, they notwithstanding passed along in safety. Some idea may be formed of their dangerous position when we state that the bottling is nearly 190 feet above the bed of the river, and the distance, from one end of the bridge to the other, about a quarter of a mile.—The time occupied in passing along was three hours; and their transit was watched with the deepest interest. The sheep belonged to a flesher residing in Catrine.

PRODUCE OF ONE GRAIN.—Mr. Kirtland, of the Cantonment Farm, Greenbush, has left with us a bundle of straws, the product of a single grain of *Multicole rye*, the present season. There 124 stalks, with fair heads. The grain came up last spring, and in consequence of standing by itself, and being later than the fall-sown rye of the same kind, it did not fill well; but the number of stalks indicates an astonishing reproductive power.—*Ibid.*

ANTS AS FOOD.—White ants, or termites, are eaten by various African tribes, both raw and boiled; and it is said the Hottentots "get into good condition on this diet." In India, the natives capture great quantities of these insects, which they mix up with flour, producing a kind of pastry which is purchased at a cheap rate by the poorer people. Some of the Africans prepare large quantities of them for food, by parching them in kettles over a slow fire. In this condition they are eaten by handfuls as delicious food. The traveller Smeathman states that he often ate them dressed in this way and found them to be "delicate, nourishing and wholesome, resembling in flavour sugared cream, or sweet-almond paste." In Brazil, the abdomens of yellow ants are of the South American countries, ants are mixed with resin, and eaten as sauce. In Siam ant's eggs are considered a luxury; they are sent to table curried, or rolled in green leaves, mingled with fine slices or shreds of fat pork. In Sweden, ants are distilled along with rye, to give a flavour to the inferior kinds of brandy. Chemists have ascertained that ants secrete a pleasant kind of vinegar, or a peculiar acid called formic acid.—We derive these facts from an article on "Useful Insects and their Products," in the *Scottish Quarterly Journal of Agriculture.*