

AMERICAN REAPERS IN EUROPE.

A great trial of reaping and mowing machines recently took place at one of the royal farms in France, and the Emperor awarded the prizes in person, which were chiefly won by American machines. The French authorities had formed two distinct classes of competition—reaping and mowing—with three prizes for each class; and also a gold medal of honor for the best machine on the ground. The first prize was a gold medal and 1,000 francs; the second a silver medal and 500 francs, and the third a bronze medal and 300 francs. Twenty-five reapers appeared on the field as candidates for the honors and awards, and half an acre of heavy wheat, was set off for each. The test of superiority was cutting the wheat cleanest and in the least space of time. After a very few turns in the field, the contest lay between Burgess and Key's (Allen's Patent) and Wood's (stated to be Manny's Patent) reapers, in which the former took the lead and was unanimously awarded the first prize, the latter the second. The mowers were then set to work on a field of light grass, and in this contest one of Burgess & Key's machines took the first prize also; their reaper being granted at the same time the gold medal of honor likewise. Most of the machines on the ground were built in France. It has been stated that, although the reaper which gained the chief prizes is built upon the principle of Allen's patent, it was constructed in England. Whether this is so or not, we are not able to tell at present.

On the 27th of July the Royal Agricultural Society of Ireland held its annual exhibition at Dundalk. The trial of harvesters is described as follows by the correspondent of an able exchange, *The Irish Agricultural Review*:—"The machines that entered the list were Burgess & Key's (Allen's patent) and Wood's (Manny's patent) combined mower-and-reaper; both of American invention. It took about three minutes and a half to put Burgess & Key's into working gear in the field. I was unable to measure the time occupied in putting the other in order. Wood's machine was directed by Mr. Cranstoun, the London agent, who was assisted by two efficient and practiced Yankee men; Burgess & Key's was directed by Mr. O'Neill, of Athy, and worked by a man especially sent over for the purpose. When Mr. Cranstoun mounted the platform of his machine, and one of his assistants perched himself in the driving seat, intense excitement prevailed. The mower was instantly at full work, crossing through the very heart of an uneven piece of light old meadow; the work was pronounced good. The horses yoked to Burgess & Key's machine would not move a pace after hearing the sound of its quickly oscillating knife-blades; but fortunately, a more manageable pair was immediately procured, and soon the compact little mower was in the midst of a piece of trampled grass, which it cut better than any one expected. 'That,' exclaimed a farmer who stood beside me, 'is the d—l's invention.' Each machine cut about 4 feet 6 inches clear. Wood's mowed well; but Burgess & Key's cut lower and cleaner. My opinion of the relative merits of the two machines may be put briefly thus:—As a mower, Wood's machine is not in its present construction capable of cutting as low or clean as the other; Burgess & Key's machine does not enable the farmer to vary the height from the ground at which to mow, which I consider a great disadvantage; but it seems to me that a roller, small wheel, or sole, could be put under the extreme end of the arm for obviating this evil. The cutting apparatus varies a little. The width of the knives and the angle of the cutting edge is greater in Wood's machine. If I have been able to calculate correctly, the knives in Wood's machine do not oscillate as quickly as the other, which would account for its (to me) apparent inferiority in cutting laid grass. It has, however, the great advantage of being a second if not a first-rate reaper. It is but fair that I should mention that Mr. Tate, of the royal farm at Windsor, informed me, on the occasion of a late visit to that place, that he has mowed 122 acres this season with Wood's machine, without the expenditure of a penny for repairs."

A PROFESSOR ON BROADCLOTH.

Professor Hamilton, in an address on hygiene to the graduates of the Buffalo Medical College, denounced broadcloth as an enemy to exercise and health, but did not suggest a substitute. He says: "American gentle-

men have adopted as a national costume, broadcloth—a thin, tight-fitting black suit of broadcloth. To foreigners, we seem always in mourning: we travel in black, we write in black, we work in black. The priest, the lawyer, the doctor, the literary man, the mechanic, and even the day-laborer, choose always the same unvarying, monotonous black broadcloth; a style and material which never ought to have been adopted out of the drawing-room or the pulpit; because it is a feeble and expensive fabric; because it is at the North no suitable protection against the cold, nor is it indeed any more suitable at the South. It is too thin to be warm in the winter, and too black to be cool in the summer, but especially do we object to it because the wearer is always afraid of soiling it by exposure. Young gentlemen will not play ball, or pitch quoits, or wrestle and tumble, or any other similar thing, lest their broadcloth should be rended. They will not go out into the storm, because the broadcloth will lose its luster if rain falls upon it; they will not run because they have no confidence in the strength of the broadcloth; they dare not mount a horse, or leap a fence, because broadcloth as everybody knows is so faithless. So these young men and these older men, merchants, mechanics, and all, learn to walk, talk, and think soberly and carefully; they seldom venture to laugh to the full extent of their sides."

HOW TO LIVE LONG.

More people die annually from a want of sufficient brain-work than from an excess of it. Good health of body and mind, depends on each having its full share of exercise and work, and it would seem from history that we can better afford the body to be in a state of lassitude than allow the intellectual powers to lie dormant. There may be a physical cause for this, from the fact that much thought induces a temperate life; but the exceptions to such a rule would be found so enormous as to show that it was not the only secret. We are rather inclined to think that the most general rule and the one capable of the broadest application, by which to attain to that great desideratum, "a green old age," is to give the mind full play—to expand the powers of thought by reading and observation, and to banish the fear of death, resulting from an exhausted "knowledge-box." We have shown to what ages the old philosophers lived, and many modern ones have been equally long-lived. Galileo and Roger Bacon both lived to 78, Buffon died at 81, Goethe and West were 82, Franklin and Herschel lived to 84, and Newton and Voltaire did not finish their labors until 85. The astronomer Halley was 86 at his decease, and Sir Hans Soane was 93. Michel Angelo and Titian, the great masters of art, lived to 96. These, surely, are instances enough to stimulate the individual who wishes to live long, not to forget to cultivate the intellectual faculties and imagination, while he is attending to the physical aids of exercise, cleanliness and temperance. We all think too much of the body and neglect the higher and diviner part within us; we cleanse the temple and adorn its pillars, but we forget that the dweller therein also requires attention and care.

REMEDY FOR INSECT BITES.

When a mosquito, flea, gnat, or other noxious insect punctures the human skin, it deposits or injects an atom of an acidulous fluid of a poisonous nature. The results are irritation, a sensation of tickling, itching, or of pain. The tickling of flies we are comparatively indifferent about; but the itch produced by a flea, or gnat, or other noxious insect, disturbs our serenity, and, like the pain of a wasp or a bee sting, excites us to a remedy. The best remedies for the sting of insects are those which will instantly neutralize this acidulous poison deposited in the skin. These are either ammonia or borax. The alkaline re-action of borax is scarcely yet sufficiently appreciated. However, a time will come when its good qualities will be known, and more universally valued than ammonia, or as it is commonly termed "harts-horn;" it is moreover a salt of that innocent nature, that it may be kept in every household. The solution of borax for insect bites is made thus:—Dissolve one ounce of borax in one pint of water that has been boiled and allowed to cool. Instead of plain water, distilled rose water, elder, or orange flower water is more pleasant. The bites are to be dabbed with the solution so long as there is any irritation. For bees' or wasps'

stings, the borax solution may be made of twice the above strength. In every farmhouse this solution should be kept as a household remedy.—*S. Piase.*

TO MAKE BLACKBERRY WINE.—The following is a recipe which was given at a late meeting of the Farmer's Club, in this city, by Mr. R. G. Peardec:—"Add three pounds of refined sugar to each half gallon of the pure juice and one quart of water, and let it ferment and work off freely at the bung-hole. Care must be taken to keep the cask full. I would not recommend adding over fifty per cent of water to the juice of any fruit to make wine. The great fault is over-watering. Some grapes will make wine without sugar, but there are but few that will answer. Use more juice and less water, and give your wine age. Don't sweeten your must until you make sirup when your intention is to make wine. I have lately tasted wine made of blackberries that was equal almost to the very best imported grape wine; it was well worked in a barrel by keeping it constantly filled up, so that all the froth and matter rising with it would go over until fermentation ceased, and then bunged tight, and stood till a convenient time in winter or spring to draw off and bottle. It must be corked tight, sealed, and laid down till two years old, when it becomes a truly excellent wine." The Lawton blackberry is now cultivated extensively in various farms for the New York markets. About three hundred bushels, it is said, can be raised from one acre. Each berry is about twice the size of the common sort, and is far more rich in flavor.

VALUE OF THE EARTH-WORM.—The common earth-worm, though apt to be despised and trodden on, is really a useful creature in its way. Mr. Knapp describes it as the natural manurer of the soil, consuming on the surface the softer part of decayed vegetable matters, and conveying downwards the more woody fibers, which there molder and fertilize. They perforate the earth in all directions, thus rendering it permeable by air and water, both indispensable to vegetable life. According to Mr. Darwin's mode of expression, they give a kind of under tillage to the land, performing the same below ground that the spade does above for the garden, and the plow for arable soil. It is, in consequence, chiefly of the natural operations of worms that fields which have been overspread with lime, burnt marl, or cinders, become, in process of time, covered by a finely-divided soil, fitted for the support of vegetation. This result, though usually attributed by farmers to the "working down" of these materials, is really due to the action of earth-worms, as may be seen in the innumerable casts of which the initial soil consists. These are obviously produced by the digestive proceedings of the worms, which take into their intestinal canal a large quantity of the soil in which they feed and burrow, and then reject in the form of the so-called casts. "In this manner," says Mr. Darwin, "a field manured with marl has been covered, in the course of 20 years, with a bed of earth averaging 13 inches in thickness."—*Encyclopædia Britannica.*

AN ARTESIAN WELL.—We learn from an exchange that they have an artesian well at Louisville, Ky., which is 2,086 feet in depth. Three years were occupied in boring it. It is piped for only 90 feet, and the water pours forth at a rate of 230 gallons per minute. It rises in pipes 170 feet above the surface, and has a temperature of 76½° Fah. It is perfectly limped on issuing forth, and has a specific gravity of 1.013, furnishing, according to analysis, the gases, sulphurated hydrogen, carbonic acid, and nitrogen, containing most of the chlorides, sulphates, bicarbonates, and phosphates, with iodine and bromid magnesium. The taste is a combination of salt and sulphur. By touching some of the screws about the machinery, it throws a stream of water 120 feet above the pipe. A deep well and a tall throw, this Louisville well! We should like to see it.

VIRGINIA MECHANICS' INSTITUTE.—The sixth annual exhibition of the above institute will open in Richmond, Va., on the 19th of October next. Northern manufacturers and mechanics will do well to bear this exhibition in mind, as there is a wide market in Virginia for many articles of handicraft which are not produced in that State. Information and circulars can be procured of Wm. Forbes, chairman, Richmond, Va.