

of the same element, or may not even want it at all. The practice likewise causes a saving of manure, for when the food a crop requires has not been abstracted from the soil by a previous crop, manure will sometimes be superfluous.—Potatoes, scarlet-runners, broccoli, and the cabbage tribe, particularly demand a fresh soil yearly. Pansies, hyacinths, and other bulbs and florists' flowers that are of hybrid origin, are equally fastidious, if they are to be grown to great perfection.

By ridging up the ground in winter for vegetable crops, and thus admitting new gases from the air, and salts from snow or rain, the rotation plan of cropping becomes less necessary, though it may never be entirely dispensed with. Perhaps when the precise food which every individual crop requires, and the manures fully capable of supplying such are more thoroughly known and experimentally tested, the necessity for changing yearly the vegetable tenants of any particular piece of land that best suits a certain tribe, may be almost if not altogether annihilated."

**IMPROVEMENT IN BRICK MAKING.**—An invention has, it is stated, just been patented in England, for the adaptation of a preparation of coke and other substances, by which bricks, paving slabs, door and stair steps, tiles, pipes, blocks, railway sleepers and other articles of general use by builders, &c., can be produced with a perfection and at a cost which it is expected by the inventor will effect a complete revolution in the building trade. The price at which it is proposed to offer the coke brick to the public is scarcely one-third of the cost of the clay brick, while in point of durability it is superior to the best article supplied from the kilns.

**FLAT ROOFS.**—All the new houses which have been built in New York recently, have what are termed flat roofs. The roof is nearly level, and old humped roofs are fast disappearing, we wonder how they ever came into use. The inventor of them must have been a man of comical ideas. The flat roofs are covered with tin and well painted. If a fire takes place in a building it is easy to walk and work on the flat roof so as to command the fire if it be in the adjacent building; this cannot be done on peaked roofs. Flat roofs are cheaper and more convenient in every respect. We advise all those who intend to build new houses to have flat roofs upon them. It is far better to have a flush story at the top of the building than a peaked cramped up garret which is only comfortable for travelling on the hands and knees.—*Scientific American*.

**TAKE CARE OF YOUR FEET.**—Of all parts of the body, says Dr. Robertson, there is not one which ought to be so carefully attended to as the feet. Every person knows from experience that colds, and many other diseases which proceed from the same, are attributed to cold feet. The feet are at such a distance from the "wheel at the cistern" of the system, that the circulation of the blood

may be very easily checked. Yet for all this, and although every person of common sense should be aware of the truth of what we have stated, there is no part of the human body so much trifled with as the feet. The young, and would-be-gentle-footed, cramp their feet into thin-soled pinching boots and shoes, in order to display neat feet, in the fashionable sense of the term. There is one great evil, against which every person should be on their guard, and it is one which is not often guarded against—we mean the change of warm for cold shoes or boots. A change is often made from thick to thin soled shoes, without reflecting on the consequences that might ensue. In cold weather, boots and shoes made of good thick leather, both in soles and uppers, should be worn by all. Water-tights are not good if they are tights also; india-rubber over-shoes should never be worn except in wet splashy weather, and then not very long at once. It is hurtful to the feet to wear any covering that is air-tight over them, and for this reason india-rubber should be worn as seldom as possible. No part of the body should be allowed to have a covering that entirely obstructed the passage of the carbonic gas from the pores of the skin outwards, and the moderate passage of air inwards to the skin. Life can be destroyed in a very short time, by entirely closing up the pores of the skin. Good warm stockings and thick-soled boots and shoes are conservatories of health, and consequently of human happiness.—*Scientific American*.

**LIFE PRESERVERS.**—One of the most useful and important inventions of the present day is the Life-Preserving Seats of Mr. George P. Tewksbury. We know of nothing since the invention of the Davy Lamp by Sir Humphrey Davy that can be at all compared with the present invention, in so far as relates to the preservation of human life. These seats are in the form of stools and settees, and are so constructed that whilst they answer the purpose of ordinary stools and settees, take no more room, and are just as portable, they possess such buoyancy that one stool will easily support one person on the surface of the water, and a settee that will seat three persons will support the same number. No steamboat, ship or pleasure boat should be without an adequate supply. The government, we understand, are about adopting them in the ships of war and other government vessels, and the time must soon come when they will be in universal demand, and their inventor looked upon as one of the greatest benefactors of our race. We are much mistaken if the Royal Humane Society of England does not show its appreciation of Mr. Tewksbury's invention by some substantial token of acknowledgment. We trust, moreover, that our citizens will not be slow in manifesting their gratitude for the invaluable boon thus conferred, and not leave it for posterity to do, as has been the case with other benefactors. Another invention by the same gentleman, partaking of the same character, is a life-boat constructed on new principles, and far surpassing any other now in use. Indeed, so admirably is it calculated for its important office, that under no circumstances can it founder, sink, or be inverted, unless it be completely broken.—*International*.

The *Scientific American* thinks cast iron pavements for road ways will supersede the McAdams, Russ and all stone pavements now in use.