

transpire before the effects are obliterated. These four considerations ought to be forcible enough to induce every gardener to resolve that he will henceforth give no quarter to weeds.—*Delenda est Carthago!*

As to the *expense*, which is often alleged as the grand impediment in the way of weed extermination; let the gardener compute the difference between a constant hoeing, &c., to prevent the growth of those thieves, and the hard tasked labour demanded to clear the ground of them when they are grown, and he will find that in a pecuniary point of view the advantage is on the side of cleanliness. There can be no doubt which is really the cheapest mode when the superiority of clean crops is considered. Ply the hoe then well—rake your beds often, and you will reap great benefits. If in any case great weeds have grown up, they had better be cleared away by hand, for if allowed to fall on the soil, they often take root again, or shed their seeds before they can be raked away.—*H. B., in Gardeners' Chronicle.*

**CHARRED WEEDS.**—Everything in the nature of charcoal, whether wood, weeds, or stubble, which is susceptible of being charred, or converted into charcoal, will be found of the greatest benefit in its application to the soil. My gardener never potted a plant without putting charcoal to the bottom of the pot, and it was found that the root was invariably drawn down to the charcoal, and fed by it, that substance having the power of absorbing both moisture and ammonia from rain and the air, which is stored up for the use of the plant. Charcoal will be found to give an amazing vigour to the young plant, which will be enabled thus to grow up out of the way of the fly, in a manner which no other means could impart. I mention this fact, inasmuch as the experiment is in the reach of all. I have had lands which were absorbed by that horrible enemy to the farmer, which, like other bad characters, rejoiced in a number of names, and had a plurality of *aliases*, but was generally known as “scrutch or couch;” this I have caused to be charred and applied to the land with immense benefit, and thus have I converted an enemy into a friend. Whenever wood, weeds, stubble, or the clippings of hedges, could be procured, it should be charred with the view of drilling in. I have some mangold wurzel, the crop of which had at first been nearly eaten up by the black aphid, but which made the greatest efforts to recover itself, by throwing out fibres and rootlets to feed on the charred substances, and thus a good crop was ultimately secured.—*W. Whitmore, Gard. and Farm. Journal.*

**METROPOLITAN SEWAGE AND DRAINAGE.**—At a time when the importance of an efficient drainage of London is urged upon public attention

and considered by government, the sentiments expressed by Mr. Heyworth, a Liverpool merchant, in a letter addressed by him to the Secretary of the Health of Towns Association, may be considered highly interesting. Mr. Heyworth says—“From practical observation, I believe that if the noxious matters which, now being left to waste, generate disease and spread desolation over our population, were scientifically collected and transferred to the soil, they would not only remunerate all cost by the abundant fertility they would induce, but would be a mine of wealth to the promoters of any scheme for this purpose, and, thus the promoting of self-interest would therefore forward be the security of public health. By means of earthen pipes, small covered cesspools, and stench-trays, I convey all the waste water, including that from the water-closets, chambers, scullery, wash-house, &c., and all other feculent matter in a diluted state, from my residence, stables, sheep-pens, &c., into one end of a large excavated dung-pit, which, being always covered with litter, never allows any escape of noxious effluvia; at the other end of the pit I have covered well outside, communicating by small openings with the bottom of this pit, from which the fluid manure is lifted by a pump into a covered water-tight cart, and carried upon the fields. The quantity of this liquid manure from my single establishment covers annually about 20 acres, and renders them profusely luxuriant. For the rain-water and springs, I have separate and distinct drains, which is an essential arrangement. What should prevent a scheme so encouragingly profitable from being applied in collecting and distributing the liquid manure of towns generally, if incorporated companies were authorized by acts of Parliament to enter upon such undertakings?”

#### DUTIES OF FARM SERVANTS IN 1653.

The following enumeration of the duties of farm servants about two centuries since, is extracted from ‘Gervase Markham’s Farewell to Husbandry,’ published about that period:—

‘About this time (Christmas) the ploughman shall rise before four o’clock in the morning, and after thanks given to Heaven for his rest, and the success of his labours, he shall go into his stable, and first he shall fodder his cattle; then he shall curry his horses, rub them with cloths and wisps, and make both them and the stable as clean as may be; then he shall water both his oxen and horses, and housing them again, give them more fodder, and to his horse by all means provender, as chaff and dry pease or beans, or oats. And whilst they are eating their meat, he shall prepare his plough-gear, and to these labours I will also allow full two hours—that is, from four o’clock till six; then shall he come in to breakfast, and to that I allow half an hour, and then another half hour to the gearing and yoking of his cattle,