## From the Persisn:

mutecourtship

> By Thomas More, Ess.

Love bath a language of his own,A voice that goes
From heart to heart,-whose mystic tone Love only knows.
The lotus-fower, whose leaves 1 now Kiss silently,
Far more than words will tell me how 1 worship thee.

The nirror which to thee I hold,Which, whan impress'd
Wih thy bright looks, I turn and fold 'To this fond breast,-
Doth it not speak, beyond all spells Of poet's art,
How deep thy hidden image dwells In this hush'd heart ?

## Utility of the earth-worm

The worm-casts, which so much annoy the gardener by deforming his smooth-shaven lawns, are of no small importance to the agriculturist; and this despised creature is not only of great ser-
vice in loosening the earth and rendering it permeable by air and wate in loosening but is also a taost active and powerful agent in adding to the depth of the soil, and in covering comparatively barren tract; with a supericial layer of wholesome mould. In a paper ' On the Formation of Mould,' read before the Geologisal Society of London, by Charles Darwin, Esq., F. G. S., now one of the secretaries, the author commenced by remarking on two of the most striking characters by which the supertacial lay er of earth, or, as
it is commonly called, vagetable mould, is distinguished. These are, its nearly hothegenous nature, althongh overlying diterent kinds of sulise:i, and the uniform fineness of its particles. The latter fact way be well observed ia any gravelly country, where, although in a ploughed field, a large proportion of the soil consists of small stones, yet in oid pastare-land not a single peblhe wial be found within seme inches of the surface. The author's attemion was called to this subject by Mr. Wedgwood, of Haer Hall in Staffordshire, who showed him several fields, some of which, few years before, had been covered with lime, and others with burnt mall and cinders. These substances, in every case, are now buried to the depth of some inche beaeath the turf. Three felds were examined with care : tha first consisted of good pasture-land, which had been lined, without having been ploughed, about twelve years and a half before; the turf was about half an ineh thick; and two inches and a hali beneath it was a layer or row of mall aggregated lumps of the line, forming, at an equal depth, well-marked white line. The soil be neath this was of a gravely nature, and differed very considenally from the mond nearer the surface. About three years since cinders likewise wore spread on this field: these are now buried at the depth of one inch, forming a line of black spots parallel to and above the white layer of lime. Some other cinders, which had been scattered in another part of the same fiell, were either still lying on the surface or entangled in the roots of the gaass. The second fold examined markable only from the cinders being now buried in a layer, near-
If an inch thick, three inches beneath the surface. This layer Iy an inch thick, three inches beneuth the surface. This layer attachad to the subsoil of red clay by the longer roots of the grass.
The history of the third field is more complete. Previously to fifteen years since it was waste land; but at that time it was drained, harrowed, plonghed, and well covered with burnt marl and cisiders. It has not since been disturbed, and now stpports a tolerably good pasture. The section here was-turf half an inch, mould two inches and a half; a layer one and a half inch thick, composed of fragments of burnt marl (conspicuous from their bright red colour, and some of considerable size, namely, one inch by balf an inch broad, and a quarter thivk), of cinders, and a fow quartz pebbles mingled with earth ; lastly, about four inches and a half beneath the surface was the original black peaty soil. Thus beneath a layer (nearly four inches thich) of fine particles of earth, mixed with some vegetable matter, those substanens now occurred, which, fifteen years before, had been spread on the sarface. Mr. Darwin stated that the appearance in all cases was as if the fragments had, as the farmers believe, worlied themselves down. Itdoes not however appear at all possible that either the powdered lime or the fragments of burnt marl and the pelbles could sink through compact earth to some inches beneath the surface, and still remain in a continuous layer; nor is it probable that the decay of the grass, although adding to the surface some of the constituent parts of the mould, should separate in so short a time the fine from the coarse earth, and accuanulate the former on those objects which so lately were strewed on the surface. Mr.
nppear to have been ploughed, he had often been surprised by finding pieces of pottery and bones some inches below the turf. On tlie nountains of Chile he had been perplexed by noticing elevated marine shells, covered by earth, in situations where rain could not have washed it on them.
The explanation of these circumstances, which occurred to Mr. Wedgwood, although at first it may appear trivial, the author does not doubt is the correct one, namely, that tho whole is due to the digestive process by which the common Earth-worm is supported. On carefully examiuing between the blades of grass in the fields above described, the author found that there was scarcely a space of two inches square without a little heap of the cylindrieal castings of worms. It is well known that worms swallow earthy matter, and that, having separated the serviceable portion, they eject at the mouth of their burrows the remainder in little intestine shaped berps. The worm is unable to swallow coarse partictes and as it would naturally avoid pure lime, the fine earth lying beneath either the cinders and burnt marl, or the powdered lime would, by a slow process, be removed and thrown up to the sur face. This supposition is not inaginary, for in the feld in which cinders had been spread out only half a year before, Mr. Darwin actually saw the castings of the worms heaped on the maller fragments. Nor is the agency so trivial as it at first nught be thought, the great number of Earth-worms (as every one must be aware who has ever dug in a grass-field) making up for the insirnificant quantity of worik which each performs.
On the above hypothesis, the great advantage of old pasture land, which farmers are always particnlarly averse from breaking up, is explained ; for the worms must require a considerable length of time to prepare a thick stratuan of mould, by thorouglly mingling the original constituent parts of the soil, as well as the manares added by man. In the paty feld, in fifteen years, about three inches and a haif had heen well digested. It is probable, however, that the process is cuatinued, though at a slow rate to a much greater depth; for as often as a worm is compelled by dry weather or any other cause to descend deep, it must bring to the surfice, when it emplies the contents of its body, a few partieles of earth. The author concluded by remarking, that it is probable that every particle of earth in old pasture land has passed through the intestines of worms, and honce that in some senses the term "arimal mould" would be more appropriate than "re getable mond." The agriculturist, in ploughiag the ground, fol lows a method strietly natural ; and he cnly imitates in a rude manner, without being able either to bury the pebbles or to sif the fine from the coarse soil, the work which nature is daily per forning by the agency of the carth-worm.
Since this paper was read Mr. Darwin has received from Stafforishire the two fullowing statoments :-1. In the spring of 183.5 a boggy feld was so thickly coverel with sand that the surfice ap peared of a rad colour, but the sand is now overlaid with threcquarters of an inch of soil. 2. About eighty years ago a field was manured with marl, and it has been since plonghed, but it is not known at what exact period. An meperfect layer of the mari now exists at a depth, very carcfully mensured from the surface, of welve inches in some places and fourteen inothers, the difference corresponding to the top and hollews of the ridges or butts. It is certain that the marl was buried before the field was ploughed, because the fragments are not scattered through the soil, but consti ute a layer which is horizontal, and therefore not parallel to the undulations of the ploughed surface. No plough, moreover, could reach the marl in its present position, as the furrows in this neighbourhood are never more than eight inches in depth. In the above paper it is shown that three inches and a balf of nould had been accumulated in fiftern years; and in this case, within eighty years (that is, on the supposition, rendered probable from the agricul tural state of this part of the country, that the feld had never befure been marled) the Earth-worms have covered the marl with a bed of earth averaging thirteen inches in thickness.

## From "Heads of the People."

## the monthly nurse

"The Monthly Nurse-taking the class in the lump, without such exceptions as will be noticed before we conclude-is a mid-dle-aged, motherly sort of a gossiping, hushing, fattering, dictatorial, knowing, ignorant, not very delicate, comfortable, uneasy, slip-slop kind of a blinking individual, between asleep and awake, whose business it is-under Providence and the doctor---to see that a child be not ushered with too little officiousness in the world, nor brought up with too much good sense during the first month of its existence. All grown people, with her, (excepting her own family,) consist of wives who are brought to bed, and husbands who are bound to be extremely sensible of the supremacy of that event ; and all the rising generation are infants in laced caps, not five weeks old, with incessant thirst, screaming fices, thumpable backs, and red little minnikin hands tipped with hints of nails. She is the only maker of candle in the world. She takes snuff osten tatiously, drams adrisediy, tea incessantly, advice indignantly, a nap when she canget it, cold whenever there is a crick in the door, and the repainder of whatsoever her mistress leaves to eat or drink, provided it is what somebody else would like to have. But
dinner' that the servant-maid has; though ncesty but the washerwoman beats her at a 'dish 'o tea,' or at that which ' lieeps cold out of the stomach,' and puts weakness into it. If she is thin, she is generally straight as a stick, being of a condition of hody that not even drams wiil tumefy. If she is fat, she is one of the fubsiest of the cosy ; though rheunatic withal, and requiring a complexional grod-nature to settle the irritabilities of her position, and turn the balance in favour of comfort or hope. She is the victim of watching ; the arbitress of her superiors; the servant, yet rival, of doctors ; the opposer of innovations ; the regretter of all od household religions as to pap-boats, eradles, and swathes the inhatitant a hundred bed-rooms ; the Juno Lucina of the ancients, or goddess of child-birth, in the likeness of a cook-maid. Her greatest consolation under a death (next to the corner-cupboard, and the not having had her advice taken about a piece of flannel,) is the handsomeness of the copse ; and her greatest plensure in lite, is when lady and baby are both gone to sleep, the fire bright, the kettle boiling, and her corns quiessent. She then first takes a pinch of snafi, by way of pungent anticipation of biss, or as a sort of concentrated ezsence of saisfaction; then a glass of spiris---then pats the water ia the tea-pot---then takes another glass of spirits (the thet having been a samll one, and the coming an affording a ' counteration') ---theu smoothes down her apron ajusts herselfin her am-chair, pours out the first cupof tea, and sits for a minute or two starigig at tho fire, with the solid complacency of an owl,--perhens not withoat something of his snore, between whecze and s:ulti-jox.
" Good and ill matire, as is the case of every one e'se, make the great differeace betwoen the endurability, or otherwise, of this personage in your honse ; ard the sume qualties, in the master and mistress, together with the armont of their good sense, of the want of it, have a here-agion. The grod or ill, therefore, that is here said of the class in general, beromes applicable to the individual aceordiagly. But asall poople will get what power they can, the pleasant by pleasaut means, and the unpleasant by tho reverse, so the office of the Monhly Nurse, be her temper and nature what it will, is one that emplatically esposes her to temptation that way ; and her frist endeavour, when she comes into a house, is to see how far she can establith an madisputed authority on all points. In proportion to her saccess or otherwise in this subject, she looks upon the lady as a charming, reasonable, fine, weak, cheatable creature, whose husbaid (as she tellis him) 'cau never be too grateful for her bearing sach troubles on his account ;' or as a Frenchified couceited madam, who will turn out a deplorable match fur the poor gentleman, and assuredty be the death of the baby with her tantrums about ' natura! livis,,' and her blasphemies against rum, pieces of fit, and Dafiy's Elixir. The genteman in liko manner-or 'mater,' as the humbler ones call him -is, according as he bebaves himselif, and receives her revelations for gospel, a ' sweet good man'-quite a genteman'-c' jast tho very model of a husband for mititress,' etc. ete.; or, on the other band, he is a 'very strange gentleman'- 'aquite an oddity-one that is ' not to be taught his own good'-that will ' neither be led nor aruv'- that with be the death of mistress with his constant fidge-fidre in and ont of the roon'-and his mading her 'langh in that dreadful manuer,' and so forth ;-and, as to his ' pretending to hold the baby, it is like a cow with a candlestick.' ' Holding the baby,' indeed, is a science, which she reckons to belong exclusively to herself; she takes it the grentest favour to tisiter or servant to let them venfure upoa a trial of it ; and affable iutimations are given to the oldest inothers of families, who come to see her mistress, how they will do well to receive a little instruction on that head, and not venture to subsitute their fine-spun theories for her solid pratice ; for your Monthly Nurse (next to a positiva grandson) is the greatest teacher of your grandmother how to suck eggs in the world, and you may have been forty years in the habit of sticking a pia, and find your competency come to nothing before the explanatory pity of her information.

Respecting the 'doctor,' ber thoughts cannot be so bold or even so patronising. She is confessedly second to him, while he is present; and when he has left the room, a spell remains apon her from his superior knowledge. Yet she has her hearty likes or disilikes of him too, and on the sime grounds of self-reference. If she likes him, there ' never was such a beautiful doctor' except perhaps Sir Wiliiam, or Doctor Buttermouth, (both dead,) and always excepting the one that recommended herself. He is a 'fine man'-so patient-so without pride-and yet ' so firm, like ;'nobody concs near him for a ditficult case-for a fever case-for the management of a ' violent lady.' If she dislikes him, he is ' queer'- '- odd'...' stubborn'-..- has the ' new ways,'-..-very propor, she has no doubt, but not what she has been used to, or seen practised by the doctors abcut court. And whether she likes him or not, she has always a saving grace for herself, of superiority to all other nurses, in point of experience and geod luck. She has always seen a case of more difficulty than the one in hand, and knows what was done for it; and Doctor Gripps, who is ' always' called in to such cases, and who is a very pleasant though rough sort of gentleman, calls her his 'other right hand,' and 'the jewel that rhymes to gruel.'

Armed with these potential notions in general, and the strongest posisible sense of her vice-royalty over master and mistress for $i_{\text {the }}$ time being, she takes possession of the new room and the new

