

say at 5 years old, 10, 15, 20 and 25, then 50 or 60, setting down the age and proportions of principles found, opposite the age in each case—that is, of persons in good sound health, and first-rate joyous spirits, at the different ages mentioned; then again at the same periods—5, 10, 15, 20, 25, 50 and 60—the blood of weakly individuals, say labouring under fever, ague, rheumatism, cholera, and other fearful and distressing complaints; set them also down opposite their respective ages—*this must be quite true and correct*—and then, by comparing the proportions of principles found in the blood of sick and healthy persons, you will see what is wanted in the debilitated, unsound or weak blood, to make it good and sound; for just according to the state of the blood, so will the health be: if pure, the health will be good, vigorous and wholesome also. Let the terms used in the explanation of the principles be as plain as possible, so as to be easily understood; and also the grain, vegetables, meat, milk, fruit, &c., containing the greatest amount of good and wholesome principles, and the state in which it ought to be used—as, should flour be bolted very fine, or should not the greater part or whole of the shorts be mixed with the flour, to make the most wholesome or best blood. The blood of different animals deserves enquiry: indeed all grains, flesh, vegetables, fruits—every thing that is used by man and his domestic animals, horses, cattle, sheep, &c.—should be analyzed, to see which is the best adapted to the blood of each; of course the best blood of each must be analyzed also, so that the constituents in the blood of each animal may receive suitable nourishment—for instance, the blood that contains much carbon, will require grain that contains this carbon in the greatest abundance, and the animal will thrive and flourish, or grow better and smarter, the more he gets of it—not too much, however. It would be a treasure for the farmer to know and avail himself of all this!!! and the position which you hold at present points you out as the good instrument. Even your own interest depends on the truth and intelligence of your periodical; for a work of this nature, being cheap and new, and enjoying also as yours does a very wide circulation, will be more eagerly sought after and read with more avidity than books. Do not be afraid of giving the people too much knowledge, for it tends to their virtue and prosperity; knowledge and virtue, joined hand in hand, will make the people happy, or in other words, love each other. I hope you will be able to have it out in the September number, or at least the most important part of it. I have written to the editor of the *Genesee Farmer* also, to publish an analysis in his paper as above. Which will be the most correct? I enclose you a dollar, for which you will please send me a copy of your journal from the commencement of the year, and oblige

Your humble and obedient servant,
MALCOLM WEIR.

[We insert our correspondent's inquiries, and shall be glad to receive any replies from our scientific readers. In case we do not, we will consult the best authorities, and give our correspon-

dent the results of trust-worthy analyses. As to our going into original investigations of some of the most difficult branches of physiology and organic chemistry, we profess ourselves utterly incompetent. Such matters involve considerations belonging to the highest departments of experimental science; even the analysis of a soil (qualitative, and quantitative) requires much readiness at manipulation, considerable time, and more patience than many people seem to imagine. The analysis of vegetable and animal products is far more delicate and difficult. We have known from five to ten guineas given to competent chemists in England for a single analysis of inorganic substances. Unless experiments are conducted upon correct principles, and the greatest care used at every stage of the process, the result can only mislead.]

DURHAM CATTLE.

To the Editors of the *Agriculturist*.

Woodhill, Canada West, Sep., 1849.

GENTLEMEN,—I take the liberty of soliciting a corner of your journal, to correct (what I conceive to be) an erroneous impression lately made by the publication of an article relating to *Improved Short Horn Stock*. It appears that Mr. Sherwood of Auburn, N. Y., has lately added to his well known valuable herd, a bull, imported from Mr. Bates of Kirk-leavington, county of York, England. I entirely agree with Mr. Stevens, who purchased this bull for Mr. Sherwood, that, taking into due consideration *all the qualities* which render cattle profitable, there is probably no herd in England which will bear a fair comparison with that of Mr. Bates. This I most readily concede, but I consider the estimate made of Mr. Sherwood's bull as being rather "*broad-cast*" sowing, when it is asserted, that "breeders will nowhere else in North America find Mr. Bates's blood in like perfection. If Mr. Stevens means only to express his personal opinion upon Mr. Sherwood's bull, as a means of obtaining the *Duchess blood* through an animal which he considers to be the finest of that tribe in North America, then his opinion will go for its own value, and no more.—If he means to go further than that, I, for one, demur. I knew Mr. Bates for more than 35 years; I have been acquainted with his stock since 1812. We were ever on terms of the most intimate friendship and correspondence, and I take upon me to assert, without hesitation, that the *great and precious feature of his stock*, what he always considered his special boast and treasure, was, his possession of the *old, pure, Duchess blood*. To obtain this, he neither spared money nor pains, and I well remember the pride with which he exhibited to me, at Halton Castle, Northumberland, where he then farmed, "*Young Duchess*," a heifer of a year old, for which he had paid Mr. Colling *one hundred and eighty guineas*.

Now, sir, there is no doubt whatever that this highly prized "*Duchess blood*" has been for