



## XXXVII. On poisonous tea-leaves

Mr. James Millar

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of any use, or that they even turn round: for, if friction were inversely as the velocity, they could (as we have already seen) have no disposition to move,—nay, their inertia would always oblige them to remain at rest.

Several other necessary observations I shall pass over at present, and conclude with one remark on Mr. T.'s statement already quoted, that (*cæt. par.*) “the depth of impression is as the force.” Now this again obviously implies, that the resistance to impression is *uniform*, or the same at any depth, than which nothing can be more absurd; since even on a fluid, the resistance increases exactly as the depth. How much more quickly must it do so on a hard road! I am, sir,

Your most obedient servant,

HENRY MEIKLE.

XXXVII. *On poisonous Tea-Leaves.* By Mr. JAMES MILLAR,

To Mr. Tilloch.

SIR, — **T**HE regular establishments for the manufactory of imitation tea-leaves arrested not long ago the attention of the public; and the parties by whom these manufactories were conducted, together with numerous venders of the factitious tea, did not escape the hand of justice. The fraud of manufacturing sloe and white thorn leaves into an imitation of tea, which has been drunk by the public as the genuine beverage of tea, is comparatively harmless, when compared with the fraud lately detected of manufacturing real genuine unsaleable tea-dust into tea, by means of a process which renders the article absolutely deleterious to health. In proof of this statement, you will have the goodness to lay before the public, through the medium of your Magazine, the following facts.

A poor woman, having purchased an ounce of green tea, was struck by the lively blue colour which the beverage made of it assumed, on pouring into it a tea-spoonful of spirit of hartshorn. This person (a char-woman) being in the habit of frequently partaking of tea in other houses where she went to work, and being constantly in the habit of adding a tea-spoonful of hartshorn to the tea-beverage, without having observed that singular appearance which her own tea-leaves produced, made a complaint to the grocer from whose shop the tea was purchased. This person, unconscious of any deleterious admixture, having paid a fair price for his commodity, took a sample of the suspected tea-leaves to Mr. Accum the chemist, who analysed it, and pronounced it to contain copper. So unexpected a result induced the

the vender of the poisonous tea-leaves, whose whole support depended on the rectitude of a fair tradesman, to inquire into the fraud committed upon him. He consulted some of his friends who received their tea from the same quarter, and it became evident that the deceptions practised in this diabolical branch of commerce were greater than was by him expected. The poisonous tea had all the appearance of the leaves of genuine Hyson; but it was noticed by the chemist who examined the suspected samples, that a portion of the leaves when infused in boiling water became speedily resolved into a fine powder, and that part of this alone remained in an entire state, so as to make it possible to recognise the vegetable structure; and this led to the opinion that the manufacturer of the poisonous commodity had employed the dust of the leaves of Hyson tea, [the sale of which forms a regular business with many tea-brokers], and moulded it, probably by means of a small quantity of mucilage, into a compound possessing in every respect the external characters of genuine Hyson tea. This fraud may therefore be detected by merely throwing the sophisticated tea-leaves into warm water, which instantly causes them to fall into a fine powder, which speedily settles to the bottom of the vessel. The infusion, when mingled with liquid ammonia, affords a bright blueish green colour, indicating the presence of copper. But the presence of this metal may be more strikingly rendered obvious, by mixing two parts of the suspected tea-leaves with one of nitrate of potash (saltpetre), and throwing the mixture into a crucible kept red hot in a common fire. The whole of the vegetable matter of the tea will thus become destroyed, and the copper remain behind in combination with the alkali of the saltpetre. If water therefore be poured into the crucible to dissolve the mass, the presence of copper will be incontrovertibly rendered obvious, by the admixture of liquid ammonia, which imparts to the fluid a beautiful sapphire blue colour.

I am with respect, sir,

Your humble servant,

Grove Cottage, Lisson Green, Sept. 22, 1819.

JAMES MILLAR.

P. S.—Mr. Accum, in his Report, remarks that the copper employed for colouring the tea is in the state of a carbonate, and not as verdigris, which he states totally inapplicable for its fraudulent purpose of giving a bloom to the tea-leaves. I need not remind your readers, that all preparations of copper are deadly poisons.—J. M.