

Copy
From the Manchester Technical Laboratory
32 Blackfriars St. Manchester
22 August. 1894. —

In accordance with instructions I visited
last week the works of the Societe Anonyme de
Ecorce Belges at Tournai-Épisy, near Mons,
Belgium where the Orr White Lead process is
being carried on; and now have pleasure in
presenting the result of my investigation.

On my arrival at Mons on Tuesday the 14th
August, I learned that the works were closed for
the Belgian National Feast of the Assumption,
and would not recommence till Thursday
the 16th. I therefore took advantage of the opportu-
nity of seeing the plant standing, and
made a careful examination of the apparatus
and machinery.

On Thursday the 16th the works were
duly restarted and I was able to see the
process from beginning to end. I need
hardly enter into details of description further
than to say that the process as carried on at
Episy, corresponds exactly with the description
in Mr. Bainbridge's report, which you laid
before me.

I was much pleased with the process, & do not think that Mr Bainbridge at all overstates the advantages to be derived from its use, in fact in one or two respects I think he understates the case. - For instance, when referring to the time consumed in converting the blue lead into finished white lead, he mentions the period of 5 days, but it was demonstrated to me most clearly that lead which might exist as blue pig on the morning of one day might be easily finished White Lead ground in oil by the afternoon of the following day. -

I think too that Mr Bainbridge scarcely lays sufficient stress upon the fact that by the process of grinding out, which I saw in operation at Epsley, the white lead is absolutely never touched by hand at all, and finds its way (ground in oil) into cases ready for the market, without ever having been brought into a condition sufficiently dry, thrown off dust, or otherwise injure the health of the workmen. -

With regard to the apparatus itself, this is of a very simple description, and should involve no high charge for depreciation.

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or repairs. I might perhaps mention that the Carbonators (the vessels in which the oxide of lead, is treated with acetic acid, steam, and carbonic acid) appeared to me a little more complicated than was necessary, and I have discussed this point with both Mr Collins, & Mr Sandbridge. I have suggested that a larger carbonator of greater depth, would probably be more economical as regards steam, labor, and carbonic acid, but the two gentlemen named took up the very reasonable position that as the Carbonators now in use, had been proved to do their work with satisfactory results, it would perhaps be injudicious to introduce anything of an experimental nature into the Works which it is proposed to erect in this Country. —

While at Copley I took copious notes of the labor, fuel and other costs of the process, and since my return have compiled, & now there a cost sheet showing what I think would be the expenses on the manufacture of White lead per ton in this Country by the Orr process,

when working upon the scale of a production of one hundred tons per week.

In getting out this cost sheet, I have purposely kept the cost of oxidizing the lead & levigating the oxide, distinct from the cost of the Orr process proper, as I understand that these costs of oxidizing & levigating will be replaced by the costs of the Bradley process, which is not in operation at the Mons works.

I have had put before me Mr. Cambridge's estimates of cost of production and I find these agree substantially with my own. I brought back from Copley sample of the White Lead, which was made during my visit and have no hesitation in saying that in colour, body, covering power and analysis it is fully equal to the best White Lead on the market.

(signed) Alf R. Davis
(Davis Bros)