

How much of Old Lead, Copper, Brass and Iron goes to waste from sheer negligence in not collecting it, while our founders in these various Metals have to import either the raw material or manufactured article from other countries.

What an amount of Oil, of the very best kind for dressing new and preserving Old Leather, or for use on the stone for edge-tools, and various other purposes; could be made from the feet of neat cattle; various fancy articles from their horns; Glue from the paring of the hide, and the tendons; and curled hair for the upholsterer from the tail.

What becomes of the carcasses of our dead Horses? Mr. Mayhew of London, tells us that

"The following estimate has been made of the carcass of a dead horse, the average weight of which is from 12 to 13 cwt.:-

"Hair of mane and tail, $1\frac{1}{2}$ lbs., used for hair-cloth, stuffing mattresses, and for making bags for crushing seed in oil-mills and other purposes. Fat, 20 lbs., used for lamps after distilling, and other purposes. Intestines, 80 lbs., for gut strings. Heart and tongue a mystery. Bones, 160 lbs., for knife-handles, phosphorus, super-phosphate of lime. Hoofs, gelatine, prussiate, for fancy snuff-boxes, Shoes, 5 lbs., used for shoes again, so d for old iron."

We fear that the poor Horse, in too many cases, so soon as dead is considered of no more value, and is put out of sight as speedily as possible.

In our manufactories and workshops how much waste and destruction of material takes place, from the want of system and order in the managers, or skill and care on the part of the workmen.

Economy and perseverance, and the utilization of every substance and thing that can be rendered of any practical value, are the principles upon which we must act, if we essay to be a prosperous people, a great nation. We have in our Canada broad Lands, rich Mines, magnificent Lakes and Rivers, a vigorous climate, a superior system of Government, and Civil and Religious Liberty; and if we only use these blessings that Providence has so bountifully bestowed upon us, wisely and well, we cannot but become a happy and contented people.

FLAX AND FLAX-COTTON.

In February 1863 the Congress of the United States appropriated the sum of \$20,000 towards investigating and testing the practicability of preparing flax, so as to invest in certain cases as a substitute for cotton.

The commissioners entrusted with the investigation have presented their report, in a pamphlet of nearly one hundred pages. They have arrived at

the conclusion that an unlimited amount of flax straw may be cheaply produced, and "adapted to the use of the manufacturers of coarse linens, and may also be prepared for combination with wool in a large class of fabrics, in the preparation of which it had already been introduced." It is gratifying to know that this is already being realized, to a limited extent, in Canada.

Very excellent specimens of coarse linens, bleached and unbleached, are now produced by Messrs. Perrine Brothers, of the County of Waterloo; and it is understood that Messrs. Gooderham and Worts of Toronto, in connection with the Messrs. Perrine's, are about to establish a large linen mill in the village of Streetsville. These parties are already extensively engaged in the cultivation and scutching of flax, and certain flax manufactures, and will no doubt be successful in their proposed new branch of operations. We believe, also, that linen yarns produced by Messrs. Perrine's, have largely taken the place of the cotton yarns heretofore used by our woollen manufacturers, in the articles of mixed cloths.

That linen is well adapted for this purpose we believe there is no doubt. It takes the colours in dyeing much more readily than cotton, and in strength it is far superior to the cotton warp. A Mr. McNally of the stark mills, Manchester, N. H., who had thoroughly tested the two in the manufacture of bagging, says: "From tests of strength I have made of the yarn, I find that the flax warp stood the strain of 20lbs. weight to three threads stretched 57 inches; while cotton warp broke at 5lbs." The United States Commissioners are of the opinion that fabrics made from flax and cotton, must not only be stronger when new, but more reliable for service.

Flax has been to a limited extent cottonized in Canada, a very nice specimen of which was sent home to the Dublin Exhibition. The Commissioners already referred to says in their report:

"The preparation of flax-cotton is not yet sufficiently developed to enable us to predict decidedly its ultimate success. If more time be given this commission or a new one for further investigation, greater progress will undoubtedly be made in the present year than has been accomplished during the entire period that has been given to the subject."

"A leading object of the appropriation having been to test the practicability of substituting the fibres of flax for cotton, on cotton machinery, and also of mixing them instead of cotton with wool, we have directed our attention particularly to such modes of assimilating these fibres to cotton as