

to, and is amply warranted by the official returns contained in the report from which the above details have been taken.

HUTTON'S GUIDE TO CANADA.

We copy the following from the November number of "*The Journal of the Albert National Agricultural Training Institution, and Record of Industrial progress*:" an admirably got up monthly publication in connection with the Experimental Farm at Glasnevin, near Dublin:—

We hail the well timed appearance of this little volume with peculiar satisfaction; first, because we have the pleasure of knowing the worthy author, whose respected family reside near us, and are our frequent and welcome visitors; and secondly, because we have the fullest reliance upon the truth and accuracy of its details. No person will deny that much knowledge may be gained from the observation of intelligent travellers; and indeed without the aid of such enterprising men we should sit in comparative darkness respecting many portions of the world. But when we look for particulars to guide us in the selection of a home—then we naturally and anxiously seek for the latest, the most experienced, and the most practical authority; and after a pleasing and attentive study of this book, we feel assured we have found it in Mr. Hutton's *Guide to Canada*.

We have certainly felt frequent astonishment that among our own countrymen so great a predilection should be felt for emigrating to the United States in preference to Canada, and we believe that our admitted national prejudices have had some, and not an inconsiderable share in their decision. The idea of a more perfect enjoyment of liberty—the complete severance of monarchical ties—and the dislike to British authority across the Atlantic—may have influenced multitudes in their choice, and may cause many yet to pause and doubt. But that these feelings have been shared by emigrants from other countries, or by the best informed among our own countrymen is certainly not the case, as will more decidedly appear on consulting the 4th chapter of this work, wherein it is shown (a due estimate of the size and extent of the two countries being taken into account) that the emigration from Europe to Canada during a period of 20 years, from 1830 to 1850, has been as 5 to 1 over that to the United States, and we believe the number of our own countrymen who, after landing in New York, ultimately pass over into Canada is very great.

We also know, and have frequent proof, that Canada is by far the healthiest country, and that the deaths among our emigrants to the United States are numerous and appalling. It is a known fact that multitudes suffer grievously in their health, and would fain return home had they the means to do so, particularly as their children are reared with difficulty. We ourselves know those who have come back and declared they would have been left childless had they remained. Now, so far from this being the case with regard to Canada, Mr. Hutton and his excellent and amiable lady, after an absence of 20 years, are in vigorous health, and we may add that their numerous family are the same.

Upon many other grounds we think highly of Canada, and upon none more decidedly than that it

is a land of liberty and not of slavery. Many may say that the Northern States are exempt from the foul and disgraceful traffic in human flesh and blood; and so they are. But we cannot consider that even the Northern States, however glorious and estimable in other points of view, can ever be considered in the light of a perfectly free country, so long as they are bound down by the laws of their own Union, to assist, under heavy penalties, in the apprehension of suffering fellow creatures, whose only crime is the exercise of nature's dearest rights—escape from unwilling and most cruel bondage. It has been eloquently written, "disguise thyself as thou wilt, still, slavery, thou art a bitter draught." But America disguises nothing, and presents the "bitter draught" in all its hideous repulsiveness. Can there be a stronger argument in favor of Canada?

THE INDUSTRIAL ARTS.

MANUFACTURES OF IRON.

The manufactures of iron are of every imaginable shape and adapted to a thousand different uses. A brief description of the process by which some of the articles in common use are made, will no doubt be interesting to our younger readers. The process by which many of the coarser tools are manufactured may be seen in any common blacksmith's shop, but you will go there in vain to learn how to make a file, a pin or a needle.

FILES.—A file is a very important tool. They are as every body knows, of various shape, as flat, round, square, half round, three square, four square, and so on. They are all divided into two varieties, from the form of their teeth. When the teeth are a series of sharp edges appearing like parallel furrows, they are termed single cut; but when these teeth are crossed by a second of similar teeth, they are said to be double cut. The first are suited for brass and copper, and the second for the harder metals. Files have also different names according to their degrees of fineness. The heavier and coarser kinds of files are made from the inferior kinds of blistered steel. The finest kinds are made from the steel of the best Swedish iron, the bars of steel being selected according to the shape and use of the files to be made.

Files are made at a forge. The forge consists of fire-bellows, with coke as fuel. The anvil, one or more of which are sometimes set on the stone bench, is large, set in a large bench-like mass of mill-stone grit, and has a projection at one end, and a hole to contain a sharp-edged tool for cutting the files from the rods. It also contains a deep groove for dies and bosses.

The flat and square files are formed entirely by the hammer. One man holds the red hot bar, and strikes with a small hammer; another stands before the anvil with a two-headed hammer; the latter is in general very heavy, with a broad face for the large files. They both strike with such truth as to make the surface smooth and flat with-