After giving a description of the construction of Furnaces, and the mode of introducing the heated air by means of the furnace itself, and consequently doing away, altogether, with the expense of the fuel used in 1833, for the air-heating apparatus used by Mr. Neilson, where a separate fire was used,—he goes on to show, by experiments actually made in the Clyde iron works, during the years 1829 and 1833 respectively, from the 1st of January to the 19th of August in each year, the amazing saving arising from the introduction of hot air—the blowing engine being the same. The results as exhibited by the following table, show that the quantity of iron produced in the same time, by the employment of hot air, is equally astonishing with the saving in coal, so that the saving is of a two-fold description. The quantity of Iron produced is more than two-fold, while the quantity of fuel employed is only a little over one-fourth required by the old process of employing cold air.

*" *Table shewing the Weight of Cast Iron produced, and the average weight of Coal made use of in producing a Ton of Cast Iron at Clyde Iron Works, during the years* 1829 *and* 1833, *the Blowing Engine being the same.*

| Coke & Cold Air. | Coke & Hot Air. |
|---|---|
| 1829–The aggregate product of Cast Iron from the 1st Jan'y. to the 19th of August : | 1833–The aggregate produce of Cast Iron from the 1st. Jan'y. to the 19th of August. |
| *tons.* *cwt.* | *tons.* *cwt.* |
| 2878 18 | 6370 3 |
| averaging 8 tons 1¼ cwt. of Coals to 1 ton of Cast Iron. | averaging 2 tons 5¼ cwt. of Coals to 1 ton of Cast Iron." |

* The Table here referred to, is of so complicated a nature, that it would be attended with much inconvenience and expense to republish it in detail, only the result is therefore given.—*Editor.*