

latterly almost unknown to travellers, appears to meet with astonishing success. The number of passengers last year was 29,209, and it is anticipated that even this number, which German journalists characterize as incredible, will be considerably augmented in the present year, an additional service being now about to be established up to Basel. The boats are to go in one day from Basel to Mannheim, and thus within *four days and a half* a passenger may make his way from Switzerland to London!

MODE OF SECURING WATER-PIPES AGAINST FROST.—During the late frost almost every family in England has suffered from an evil which might have been very nearly if not entirely prevented by a very simple precaution, and at very inconsiderable cost. I refer to the freezing of water in pipes. On the return of mild weather, the pipes in most cases have burst, and great injury has been done to property and health. If the water-pipes had been enclosed in pipes or cases, and surrounded, two inches, or even one inch, by sawdust, coal-ashes, or better still, powdered charcoal (which is one of the best non-conductors we know), the water in the pipes would have retained its temperature, and the inconvenience complained of could not have taken place. There would also be this additional advantage, that in summer the water would not be (as most of the London water is) tepid when drawn from the pipe. I have been greatly surprised to find that in houses built with the utmost care, at very great expense, and by the most eminent architects, such an obvious and simple prevention against so general and serious an evil should have been so generally overlooked.—*Morning Chronicle*.

From the Bangor Farmer.

RAISING WHEAT.—Mr. Sayward.—The season for growing wheat being at hand and having heard much and read more on the subject of smutty wheat, I take the liberty to communicate to you my experience. Between the years 1820 and 1826, my crop of wheat was much injured by smut, since which time I have made use of blue vitriol, and think I can safely say I have not had a smutty head when the operation has been faithfully performed. I put into a trough or long tight box open at the top, a convenient quantity of seed wheat, after having washed it and drained the water off in a bucket, and dissolve in about a pint and a half of warm water, 2 oz. of blue vitriol to each bushel, turn the solution on the wheat, and shovel it over thoroughly until it shall give a greenish hue to the whole mass, which it will very soon do. Then put in dry wood ashes, sufficient to separate the grains for sowing, and the work is done. I do not give this as my own discovery, or any thing new, for I have seen it published several years since. But we farmers need "line upon line and precept upon precept." I think Sir Humphrey Davy is correct, when he says the smut is occasioned by insects, notwithstanding the ridicule cast upon the idea by a late writer in the *New England Farmer*. Such is my confidence in this preventive that, but for the appearance of ostentation, I would offer good wheat for all the smutty wheat any one would raise after thoroughly putting in practice the above recommendation. Many of my neighbours have tried it with uniform success. Yours, &c.

OLIVER CROSEY.

STEAM ENGINES IN GLASGOW.—To such an extent is the business of steam-engine making now carried on here that there are thirteen firms now engaged in it. Some of the works are more like national than private undertakings. Three houses alone employ upwards of a thousand persons. Dr. Cleland has ascertained that, in Glasgow and its suburbs, there are thirty-one different kinds of manufactures where steam-engines are used, and that in these, and in the collieries, quarries and steam-boats, there are 355 steam-engines, = 7,366 horse power—average power of engines rather more than 25 horses each.—*Ency. Britt.*, 7th edition.

MELODY.

Silently, O silently,
The moon-beams fall on me:
Silently, as silently,
It falls on land and sea.

Silently, still silently,
Creation's wings wax bright.
Silently, more silently,
Bright morn succeeds to night.

O let my soul thus silently,
Depart from earthly clay;
Thus silently and beamingly,
Enter the realms of day.

MESSRS. WESLEY AND WHITFIELD.—From long experience, says Dr. Adam Clarke, I know the propriety of Mr Wesley's advice to the preachers:—"Establish class-meetings, and form societies, wherever you preach, and have attentive hearers. Long experience shows the necessity of this; for wherever we have preached without doing this, the word has been like seed sown by the way side."

It was by this means that we have been enabled to establish permanent and holy churches over the whole world. Mr. Wesley saw the necessity of this from the beginning. Mr. Whitfield, when he separated from Mr. Wesley, did not follow it. What was the consequence? The fruit of Mr. Whitfield's labours died with himself. Mr. Wesley's fruit remains, grows, increases, and multiplies exceedingly.

Did Mr. Whitfield see his error? He did; but not till it was too late. His people, long unused to it, would not come under this discipline. Have I authority to say so? I have. Forty years ago I travelled in the Bradford, Wilts, Circuit with Mr. John Pool. Himself told me the following anecdote. Mr. Pool was well known to Mr. Whitfield, and having met him one day, he accosted him in the following manner:—

Whitfield.—Well, John, art thou still a Wesleyan?
Pool.—Yes, Sir; and I thank God that I have the privilege of being in connexion with Mr. Wesley, and one of his preachers.

Whitfield.—John, thou art in thy right place. My brother Wesley acted wisely. The souls that were awakened under his ministry he joined in class, and thus preserved the fruits of his labour. This I neglected; and my people are a rope of sand.

And what now remains of this great man's labour? Scarcely anything. Multitudes were converted under his ministry, and are gone to God; but there is no spiritual succession. The Tabernacle near Moorfields, the Tabernacle in Tottenham-court-road, and one in Bristol, with what is called the little school in Kingswood, are all even of his places of worship that remain; and these are mere Independent Chapels.—*Clarke's Miscellaneous Works*.

FOOLISH PHILOSOPHY.—At the close of a brilliant lecture on electricity, at the Royal Institution, by Mr. Faraday, he said he wished to mention a piece of very foolish chemical philosophy, which was too much practised at severe seasons. People, said Mr. Faraday, are in the habit of sprinkling salt upon snow before their doors. They could not do a more silly or injurious thing. The result is to change dry snow or ice at the temperature of 32 to brine at 0. The injurious effect of damp upon the feet at this excessive degree of cold is likely to be extreme. If, then, continued the lecturer, any one does sprinkle salt upon snow in the street, he ought to feel it a matter of conscience to sweep it away immediately.

Sir David Brewster has been appointed principal of the united college of St. Salvador and St. Leonard, in the university of St. Andrew's.