III. An Account of the Falls of the River Niagara, taken at Albany, Octob. 10. 1721. from Monsieur Borassaw, a French Native of Canada. By the Honourable Paul Dudley, Esq; F. R. S.

HE Falls of Niagara are a mighty Ledge or Precipice of folid Rock, that lies across the whole breadth of the River (a little before it empties it self into, or forms the Lake Ontario) and very steep.

Monsieur Borassaw never measur'd the Falls himself, though he has been there at seven different Times:

Bur what he says is, That,

This last Spring the Governour of Canada, Monfieur Vaudreil, ordered his own Son, with three other Officers, viz. Messieurs Longue Isle, St. Ville, and Laubineau to Survey Niagara, and take the exact height of the Cataract, which they accordingly did with a Stone of half an hundred Weight, and a large Cod-line, and found it upon a Perpendicular no more than twenty six Fathom; his Words were Vingt & Six Bras.

This differs very much from the Account Father Hennepin has given the World of that Cataract, for he makes it an hundred Fathom; and our Modern Maps from him, as I suppose, mark it at six hundred Feet; but I believe Hennepin never measured it, and there is no guessing at such Things.

When

When I objected Hennevin's Account of those Falls, to Monsieur Borassam, he replied; That accordingly every Body had depended upon it as right until the late Survey. Upon further Discourse he acknowledged. That below the Cataract for a great way, there were numbers of small Ledges, or Stairs cross the River, that lower'd it still more and more, till you come to a Level: fo that if all the Descents be put together, he does not know but the Difference of the Water above the Falls, and the Level below, may come up to Father Hennepin, but the strict and proper Cataract upon a perpendicular, is no more than twenty fix Fathom, or an hundred and fifty fix Foot, which yet is a prodigious Thing, and what the World I suppose cannot parallel, confidering the greatness of the River, for it is near a Quarter of an English Mile broad, and very deep Water.

Several other Things Monsieur Borassaw set me right in, as to the Falls of Niagara. Particularly it has been said, That the Cataract makes such a prodigious noise, that People can't hear one another speak, at some Miles distance, whereas he affirms, you may converse

together close by.

I have also heard it positively asserted, That the Shoot of the River, when it comes to the Precipice, was with such a mighty force, that Men and Horse might march under the Body of the River without being wet. This also he utterly denies, and says the Water talls in a manner right down.

What he observ'd farther to me was,

That the Mist or Shower (his Word was La Brume) which the Falls make, is so extraordinary, as to be seen

feen at five Leagues distance, and rises as high as the common Clouds. In this Brume or Cloud, when the Sun shines, you have always a glorious Rainbow.

Of the River it felf, which is there called the River Niagara, he tells me it is much narrower at the Falls, than either above or below, and that from below there is no coming nearer the Falls by Water, than about fix English Miles, the Torrent is so rapid, and withal such terrible Whirl-pools.

He confirms Father Hennepin's and Mr. Kellug's Account of the large Trouts of those Lakes, and solemnly affirmed there was one taken lately, that weighed eighty six Pounds; which I am the rather inclined to believe upon the general Rule that Fish are according to their Waters. To confirm which, a very worthy Minister, now alive in New England, affirmed to me; That while he was a Prisoner at Mon-real, in Canada River, he saw a Pike brought up one Day from the River to the Governour's House, and carried upon a Pole between two Men, that measured Five Foot, and Ten Inches long, and proportionably large.

I my self this last Summer, saw a Cataract, three Leagues above Albany, in the Province of New Tork, upon Schenestada River called the Cohoes, which they count much of there; and yet that is not above 40 or 50 Foot perpendicular. From these Falls also there rises a misty Cloud, which descends like small Rain, that, when the Sun shines, gives a handsome small Rain-bow that moves as you move, according to the Angle of Vision. The River at the Cohoes is to 40 or 50 Rods broad, but then it is very shallow Water, for I was told that in a dry Time, the whole River runs in a Channel of not more than sisteen Foot wide.

In my Journey to Albany, 20 Miles to the Eastward of Hudson's River, near the middle of a long rising Hill, I met with a brisk noisy Brook sufficient to serve a Water-Mill, and having observed nothing of it at the beginning of the Hill, I turned about and sollowed the Course of the Brook, till at length I found it come to an End, being Absorb'd, and sinking into the Ground, either passing through Subterraneous Passages, or soaked up with the Sand; and tho' it be common in other Parts of the World for Brooks and even Rivers thus to be lost; yet this is the first of the Sort, I have heard of, or met with in this Country.

P. Dudley.

IV. A Letter from Mr. Leeuwenhoeck, F. R.S. concerning the Muscular Fibres in several animals, and the Magnetick Quality acquired by Iron, upon standing for a long time in the same Posture.

Delft, Apr. 21st, 1722.

To the Illustrious Royal Society.

Honoured Sirs,

N a Letter I receiv'd sometime ago from one of your Secretaries, among many Expressions of your kind Acceptance of my Labours. I am requested by that Gentles