XXXIV. An Account of a new Species of the Bark-Tree, found in the Island of St. Lucia. By Mr. George Davidson; communicated by Donald Monro, M. D. Physician to the Army, F. R. S.

Read June 24, 1784.

DR. DONALD MONRO

&IR,

AVING received from my correspondent Mr. David-son, surgeon, in the island of St. Lucia, some Bark, the product of that island, which is said to possess the virtues of the Jesuit's Bark, and in a much smaller dose, I shall esteem it a favour if you will lay before the Royal Society the specimen which I have sent to you with this letter, together with Mr. Davidson's account of it, if you think they merit that honour.

I have examined the dried specimens very carefully. They are not so well preserved as I could wish; but I have since seen much siner in the possession of Sir Joseph Banks, who has done me the honour to savour me with the following character, as most distinctive of it from the other species of Cinchona already described, which he gave me an opportunity of examining.

It

It is undoubtedly a Cinchona, but not the Cinchona officinalis of Linnæus; for it differs from it effentially in its bark in feveral particulars. It has an emetic quality not common to the true bark, breaks more woody and splintery, and is far more nauseous to the taste. Its decoction is of a dull Burgundy colour; and its extract resembles more the bitter of Gentian than that of the Quinquina. I have procured sour ounces of it from half a pound of the Bark boiled in water, and herewith send to you a small specimen.

The drawings, which accompany this letter, are exact copies of the specimens which I received; I therefore hope they will not be thought unworthy the acceptance of the Royal Society.

I have the honour to be, &c.

Henrietta-street, Nov. 6, 1783.

G. WILSON.

Botanic character of the Bark-Tree of St. Lucia.

"Cinchona floribus paniculatis, glabris; laciniis linearibus, tubo longioribus; staminibus exfertis; foliis ellipticis, glabris."

Extract of a Letter from Mr. GEORGE DAVIDSON, dated St. Lucia, July 15, 1783.

IT is now about four years fince Mr. ALEXANDER
ANDERSON discovered in the woods, near the Grand Cul de
Sac, some trees resembling, in the botanical characters, the
N n n 2

true Quinquina of LINNÆUS. He brought the bark, flowers, and feeds, to Dr. Young of the General Hospital, and trial was made of it there; but not being sufficiently dried, its strong emetic and purgative qualities prevented its exhibition.

The publication of Dr. Saunders, which I received about two months ago, mentioning the introduction of a species of bark of a redder colour, and possessing greater powers than the bark formerly in use, induced us here to try the bark of this country. Dr. Young had by him some that was collected in General Grant's time: on account of the length of time it had been kept, and its being sufficiently dried, he has met with all the success he could wish.

It is manifestly more astringent than the bark, and the bitter is likewise more durable on the palate.

Hitherto I have generally used the cold insusion, either in lime or simple water, in the proportion of one ounce to three pints of the water. I have likewise given it in substance from twenty to thirty grains; but never exceeded the last quantity, for I never found the stomach able to retain more than twenty grains.

Joined with the Canella alba, it forms in spirits an agreeable and elegant tincture. I have made a tincture from the seeds, which are infinitely stronger in taste than the bark itself.

(Signed) GEO. DAVIDSON...

Mr. George Davidson's account of the Bark-Tree of the island of St. Lucia.

THE Bark-Tree of this island is nearly about the fize of the cherry-tree, seldom thicker than the thigh, and tolerably straight; the wood is light and porous, without any of the bitterness and astringency of the bark itself.

It delights in a shady situation, the north-west aspect of hills, under larger trees; and is generally to be found about the middle of an hill, near some running water.

The leaves are large, oblong, opposite, and plain, preserving (as well as the flowers and seeds) the bitter taste of the bark.

In the beginning of the rainy feafon (June), the tree puts forth its flowers in small tusts; at first they are white, but afterwards turn purplish. The stamina are five in number, with a single style. The germen is oblong, bilocular, and surrowed on each side. The feeds are many, and of the winged kind. The corolla is monopetalous, with its mouth divided into sive long segments.

The foil in general where it grows is a stiff red clay. The bark itself is of a lighter red than that sent out here to the hospital under the name of red bark. It inclines more to the colour of cinnamon. The bitterness and astringency appear to be greater than in either of the other barks.

I apprehend, the proper season for obtaining it is about the month of March, before the flowers come out: after-experience will best determine this.

Infused in cold water, in which form, or in lime-water, I generally use it, it forms a very red tincture, possessing the bitterness.

bitterness and astringency of the bark very strongly. A few drops of the Tinctura storum martialium give it a very black colour, and occasion a copious deposition of a black sediment. It does the same with the spirituous tincture.

With spirits it forms a beautiful red tincture.

Explanation of the references tab. XIX.

- A. A branch of the Cinchona of St Lucia, with the flowers not yet opened.
- B. The entire feed-veffels.
- C. A feed-veffel split.
- D. One of the feeds, of its natural fize.
- E. The same magnified.







