mers and mathematicians, ſays Dr Herlchell, I have collected the following particulars, as moſt to be de­pended upon.

Place of the node: 2s 11d 49' 3c''

Inclination of the orbit: 43' 35'

Place of the perihelion: 172d 13' 17'

Time of the perihelion paſſage: Sep. 7. 1799

Eccentricity of the orbit: 82034

Half the greater axis: 19,07904

Revolution: 83,3364 ſiderial years.

From my own obſervations on this planet’s apparent diameter, which I have found cannot well be less than 4'', nor indeed much greater, we infer, that its real dia­meter is to that of the earth as 4,454 to 1 ; and hence it appears to be of very conſiderable bulk, and, except Saturn and Jupiter, by far the largeſt of the remaining planets. Its light is of a bluiſh-white colour, and in brilliancy between that of the Moon and of. Venus. With a teleſcope which magnifies about 300 times, it appears to have a very well defined visible diſk ; but with inſtruments of a ſmall power, it can hardly be diſtinguiſhed from a fixed ſtar of between the sixth and ſeventh magnitude. In a very fine clear night, when the moon is abſent, it may alſo be ſeen by the naked

SIEGE, in the art of war, is to ſurround a fortified place with an army, and approach it by paſtages made in the ground, ſo as to be covered againſt the fire of the

SIEGEN, a town of Germany in Wetteravιa, with a caſtle and the title of a principality, which it gives to a branch of the houſe of Naſſau. It is ſeated on a river of the ſame name, in E. Long. 8. 5. N. Lat.

SIENNA, a large, ancient, and celebrated city of Tuſeany in Italy ; capital of the Sienneſe, with an archbiſhop’s ſee, a famous university, and a citadel, it is about four miles in circumference, and ſurrounded with an old wall. The metropolitan church is much eſteemed by travellers ; and though it is a Gothic structure, the architecture is admirable. It is built with black and white marble, and the pavement is of Moſaic work. The town is adorned with a great number of palaces, fountains, and ſuperb churches, as alſo a mag­nificent hoſpital. The great area is round, and the houles about it are of the ſame height, ſupported by piazzas, under which people may walk in hot or rainy weather ; in the middle is abaſon, which can be filled with water at any time, to repreſent a ſea-fight with ſmall vefſels. The Italian language is taught here with ſuch purity, that a great many foreigners frequent it on that ac­count. It is ſeated on three eminences, in a fertile soil, in E. Long. 11. 11. N. Lat.43. 10.

SIENNESE, a duchy in Italy ; bounded on the north by the Florentino, on the ſouth by the Mediterranean sea and the duchy of Castro, on the east by the Perugino and Orvietano, and on the west by the Florentino and the Tuſcan ſea ; being about 55 miles in length, and as much in breadth. The soil is pretty fer­tile, eſpecially in mulberry trees, which feed a great number of silk-worms ; and there are ſeveral mineral ſprings. Sienna is the capital town.

SIERRA Leona, a large country on the west coaſt of Africa, which ſome extend from the Grain Coaſt

on the ſouth eaſt to Cape Verga or Vega on the north- west, i*. e.* between 7⁰ and 10⁰ N. Lat. Others, how­ever, confine the country between Cape Verga and Cape Tagrin. There runs through it a great river of the ſame name, of which the ſource is unknown, but the mouth is in longitude 12. 30. west, lat. 8. 5. north, and is nine miles wide. The climate and soil of this tract ot country appear to be, on both sides of the river, among the beſt in Africa, or at leaſt the moſt favourable to European conſtitutions. The heat is much the same as that of the West Indies ; but on the higher grounds there is a cool ſea breeze, and in the mountainous parts the air is very temperate. According to Lieutenant Matthew, “ Sierra Leona, if properly cleared and cul­tivated, would be equal in ſalubrity and ſuperior in pro­duce to any of the iſlands in the Weft Indies ;” and others have affirmed, that “ the air is better for a man’s health than in many places of Europe.” ſheſe advan­tages of climate induced the Engliſh to eſtabliſh a facto­ry at Sierra Leona ; but they chose not the moſt health­ful situation. For the benefit of a ſpring of good wa­ter they fixed their residence in a low valley, which is often overspread with miſts and noiſome vapours, while the air is clear and ſerene on the ſummits of the hills, to which water from the well might be eaſily carried.

The animal productions of this country are lions, from which it has its name ; leopards, hyænas, muſk cats, and many kinds of weaſels ; the japanzee or chim­panzee, a species of ſimia, which has a ſtill more striking reſemblance to the human figure than. even the ouran outang ; porcupines, wild hogs, squirrels, and antelopes. Beſides theſe, which are natives of the country, oxen thrive in it, and even grow fat ; asses too are employed in labour, and do not ſuffer by the climate ; but sheep ſuffer much from the heat, change their wool into hair, grow lean and increaſe very lithe; while the hardy goat is here as prolific and large as in any other country. Of the birds which frequent the woods of Sierra Leona we can give no perfect account. A species of crane is mentioned as eaſily tamed ; com­mon poultry multiply fast ; ducks thrive well, but geeſe and turkeys ſeem not to agree with the climate. Turtles of all kinds are very common, and ſometimes of a large ſize. Crocodiles or alligators of a non-deſcript species have been found ten or twelve feet in length, and lizards of six different species. Snakes, which are almoſt innumerable, haunt the houſes in the night in ſearch ”of poultry ; and one was obſerved which meaſured 18 feet, but was happily found not to be venom­ous. Fiſhes are in great variety both in the ſea and in the rivers. Beſides the whale, the ſhark, flinging ray, and porpoiſe, there are eels, horſe-mackarel, tarpoons, cavillos, mullets, ſnappers, yellow-tails, old-maids, ten- pounders, and ſome other fiſhes ; all of which, except the eels and ten-pounders, are eſteemed fine eating. Oyſters are found in great abundance, and another ſhell- fiſh, which the natives eat. Among the zoophites,none is more worthy of notice than the common ſponge, which covers all the ſandy beaches of the river, parti­cularly on the Bullom ſhore, and would fetch a high price in Great Britain.

Of the numerous vegetable productions of Sierra Leona, our limits will permit us only to mention the following. Rice, which is the plant chiefly cultivated, as the natives ſubſiſt almoſt entirely upon it, grows both