APPENDIX.

tend them as much as possible; he therefore crossed all the mixedbreed ewes of which his flocks were composed, with Spanish rams. The lambs produced from this cross were much improved; but when they were again crossed, the change far exceeded his most sanguine expectations. In four crosses, he is of opinion, no distinction will be perceptible between the pure and the mixed breed. As a proof of the extraordinary and rapid improvement of his flocks, Captain M'Arthur has exhibited the fleece of a coarse-woolled ewe, that has been valued at ninepence a pound; and the fleece of her lamb, begotten by a Spanish ram, which is allowed to be worth three shillings a pound.

Captain M'Arthur has now about four thousand sheep, amongst which there are no rams but of the Spanish breed. He calculates that they will, with proper care, double themselves every two years and a half; and that in twenty years they will be so increased as to produce as much fine wool as is now imported from Spain and other countries, at an annual expense of £1,800,000 sterling. To make the principle perfectly plain upon which Captain M'Arthur founds this expectation, he begs to state, that half his flock has been raised from thirty ewes purchased in 1793, out of a ship from India, and from about eight or ten Spanish and Irish sheep purchased since. The other half of his flock were obtained in 1801, by purchases from an officer who had raised them in the same time, and from about the same number of ewes that Captain M'Arthur commenced with. This statement proves that the sheep have hitherto multiplied more rapidly than it is calculated they will do in future; but this is attributed to the first ewes being of a more prolific kind than the Spanish sheep are found to be; for since Captain M'Arthur has directed his attention to that breed he has observed the ewes do not so often produce double lambs.

As a further confirmation of the principle of increase that Captain M'Arthur has endeavoured to establish, and which he is positive time will prove to be correct, he would refer to the general returns transmitted from New South Wales. In 1796, (since when not one hundred sheep have been imported,) one thousand five hundred and thirty-one were returned as the public and private stock of the colony. In 1801, six thousand seven hundred and fifty-seven were returned; and although between those periods all the males have been killed as soon as they became fit, yet there is a surplus over the calculation of six hundred and thirty-three.

Captain M'Arthur is so convinced of the practicability of supplying this country with any quantity of fine wool it may require, that he is earnestly solicitous to prosecute this, as it appears to him, important object; and on his return to New South Wales, to devote his whole