settlements the conduct of the press must be committed to other and better hands ere it can become an instrument productive of good.\* We cannot admit its claims to universal utility—that colonization is dependent upon their newspapers as the earth upon the sun-or that christianity, liberty, and science would vanish away unaided by the tortuous vehemence of the colonial broad-sheet. Yet, supposing for a moment that the absolute moral purity of a colony-or the meridian brightness of unclouded truth-or the unrestrained thought and action appertaining to virtuous liberty- or whatever other benign blessings are yet slumbering in the womb of futurity-are altogether dependent upon the freedom of literary discussion, what can either of these derive from its licentiousness? For the sacred inviolability of truth resents and repels the advances of that hypocritical care whose basis is falsehood and whose sole strength is centred in its power and disposition to befoul and malign all opponents. And, therefore, every pretended vindication of her claims that mixes up with theoretical and abstract argument, considerations of interest and personal invective, cannot but fail to accomplish its ostensible purpose. We conclude, then, that so long as the Austral-Asian press shall continue to mingle with its statistics and its politics insinuations against sister settlements and virulence of attack upon personal character, it must be a source of erroneous division, and not unity-of suspicion and dislike,-a hindrance to the progress of the colonies, destructive of their prosperity, and prejudicial to their peace.

But once for all, we say that such need not, and—were the editors gentlemen, scholars, and christians—would not, be the results of the "liberty of unlicensed printing." Take a man of strong mental power, and perseverance, implant in his heart the principles of unchanging truth and generous forgiving feeling, and cultivate his mind with seeds of all the flowers and fruits of learning—and then, placing before him as models for his ambition those sages whose very life was light, on the intensity of whose brilliance, though diminished, we yet scarce dare to look, give him the power of telling to the world the results of such a culture, and the utterance must be wisdom, sublime in truth, and strong. Tell such a man

<sup>\*</sup> We have before mentioned the greater part of the Sydney and the Western Australian press as exceptions, but they merely prove the rule.

that evil is abroad, and point to the achievements of his forefathers in the cause of right, and his strength will feed upon the danger while he towers above the gloom, and lays prostrate the strongholds of infidelity and despotism, or "wraps them into ruins with avenging fire."

Such has not been, and will not be, the triumphs of literary discussion in our Austral-Asian colonies, until the power of the press is wielded by mightier and worthier hands. All unfitted for good as have been their instruments, all unproductive of blessing their works; there is a wide and glorious field wherein intellectual prowess may walk at will, exalting truth, and destroying error and malignity with one and the same blow. We every day hear of the importance of the press-its influence upon civilization-its services in the cause of liberty-and surely the moral, political, and social well-being of our colonies are a cause worthy of the efforts of genius -the happiness of embryo nations deserving its utmost energy. it is the boast of this proud empire that upon her dominions the sun never sets, it should be her highest anxiety, claiming a quarter of the globe as her own, to impart to it the blessings of civilization, and give to generations far advanced in futurity articulate evidences of her beneficence to dignify the monuments of her power. Where are our crusaders in literature? our Nelsons and Howards in philosophy and art? Have we not one man of intellect to vindicate the claims of England to the colonization of mind? Surely the darkness that has hitherto clouded the moral and intellectual world of the Australian colonies will be dispersed, and generosity, energy, frankness and genius proclaim to the world, that the sons of this our sea-girt isle preserve their independence, their honour, and their strength at the antipodes; and illumine by their adoption the path that has led to Britannia's glory and renown.

## ON WOOL-GROWING IN AUSTRALIA.

When we reflect upon the number of persons who annually emigrate to the Australian colonies without any definite views as to their ultimate proceedings, and also find that the greater portion of those who embark in agricultural pursuits scarcely know a ploughshare from a hay fork, much less a Leicester or Southdown sheep

from a Merino, it is more surprising to find that so many become extensive and successful flock masters than to hear occasionally of persons who are said to be disappointed in their expectations respecting the colony of their adoption.

The general success attendant upon sheep-farming in Australia is to be attributed to the climate and soil, which appear by nature intended to produce fine wool, and notwithstanding the depreciation of late years in the value of Australian wool, there can be no question that there is still an ample field for the profitable employment of either a large capital or a moderate one, combined with industry and perseverance, as well for those whose only capital is honesty, industry, and sobriety, and as sheep-farming will doubtless continue for many years the most attractive pursuit of the new settler, it may not be out of place to call the attention of the intending emigrant to the fact, that during the past five seasons a gradual depreciation in the value of Australian wool has taken place in the British market, thereby diminishing the profits of the sheep farmer, and to consider whether an improved system of sheephusbandry may not be successfully adopted in those colonies. On referring to the prices obtained for Australian wool during the last two years, it will be found that some have been sold so low as tenpence to one shilling, and one shilling and twopence a pound, and rarely exceeding one shilling and fourpence; therefore the young settler, taking all the disadvantages consequent upon establishing his flock into consideration, can hardly expect to obtain above a medium price of thirteenpence a pound.

Now as the new settler must look for his income from the clip of his flock alone for the first few years, it is obvious that these prices will not pay him, and it is therefore absolutely necessary to endeavour if possible to increase the quantity of his fleece. During past years, when the price of Australian wool was of double its present value,\* it was scarcely thought necessary to make any change in the system, beyond the introduction from time to time of the Merino ram, the only anxiety of the flock master was to increase the numbers of his flocks, and to improve the quality of his wool. Indeed, in an extensive and unenclosed country like the

<sup>•</sup> Some years since one bag of Mr M'Acton's wool, weighing one hundred weight, and properly sorted, realized 10s. per lb. In 1834 the market price for the best Australian wool was 4s. 6d. per lb.

grazing districts of New South Wales, where the flocks have only remained so long at a particular place as provender was to be found, and then driven to some far-off place, it is only surprising that so much has been done in the attainment of the pure description of Merino that now constitutes the bulk of the flocks in Australia, and if the reduction in the price of the wool from thence has been partly in consequence of the depreciation in quality, it would be useless for the new settler attempting to improve that which those who have been for years in the colony, with unlimited capital, have unsuccessfully tried to effect. It would appear as if they had reached a limit beyond which it was impossible to pass, and as the maximum of quality may be said to have been attained by some of the flock masters of Australia, the only resource appears to be, as before stated, to endeavour to obtain an increased quantity in the fleece.

Before adverting to the means whereby to attain this object, it may not be uninteresting to trace the progress of the existing breed of Australian sheep. Upon the first British settlements being formed in New South Wales, in 1788, a few sheep were introduced simply to provide the colonists with mutton, and, to this object, others were soon after procured from Bengal, possessing, however, an accumulation of bad qualities. About 1792, some Southdown and Leicester sheep were imported from England, which produced an important change both in the fleece and the carcass. Captain M'Arthur, who at that time possessed about thirty ewes of the Bengal breed, purchased eight or ten of the latter importation, with which he commenced sheep-farming, and finding the wool of these sheep to improve in quality by this cross, he continued the system; and very shortly effected a very considerable improvement in the length of staple, and peculiar softness; and reasoning that, if the fleece of these sheep became finer and softer on the soil, and under the climate of New South Wales, it was not improbable that even the Saxony wool might be increased in value, and he accordingly imported some sheep direct from Germany. It cannot perhaps be said that these anticipations were fully realized, but it soon became sufficiently evident that the properties of this cross were superior to any that the colony had hitherto possessed.

In 1803, Captain M'Arthur having occasion to visit England, exhibited some samples of his wool before a committee of manufacturers

in London; and the specimens of wool exhibited were pronounced by that body to be superior in softness to many of the wools of Spain, and certainly equal in every valuable property to the very best then obtained from thence.

Mr H. Hughes, a Blackwell Hall factor, stated, that these wools possessed "an extraordinary softness," and that "there is no other wool which spins so well as the Australian, and whether from the climate or the herbage, or both, the wool has latterly improved in softness and in staple too." Mr Donaldson, a wool merchant, also said "The Australian wools have much improved. They are decidedly preferable to the apparently slender description of German wools. From their superior softness of texture they are better adapted than the other descriptions of wools to mix with the harder staple of the English wools. They have a softness and silkiness about them which, when worked into cloth, shows itself more distinctly than in the raw material of the same description."

These opinions, together with his own observations and experience, convinced Captain M'Arthur of the practicability of supplying this country with any quantity of fine wool from Australia, and he presented a memorial to Lord Hobart, then Secretary of State for the Home Department, embodying these points, and soliciting permission to occupy a sufficient tract of unoccupied land whereon to feed his flocks, and the indulgence of selecting from amongst the convicts as many men for shepherds as he might require. obtained this permission, Captain M'Arthur purchased two ewes and several rams from the Merino flock of his Majesty King George III, and returned with these to the colony in 1806, when he removed his flocks to the cow pastures, in which district, in conformity with the directions of the home government, he selected his location, and gave to his estate, as also the district in which it was situated, the name of Camden, in honour of the nobleman then at the head of the colonial department in England.

The experiment of introducing the Merino was highly successful, and it was soon found that the third or fourth cross with the then prevalent sheep of the colony, produced an animal with a fleece equal to that of the pure Merino in Europe; and the wool of the pure breed seemed to improve as rapidly as that of the native breed had done.

Captain M'Arthur's exertions, however, were in a few years impeded by his departure from the colony, and it was not until his

return in 1817, after an absence of eight years, that he resumed, under his personal inspection, the plans he had originally devised. In this interval, however, the flocks had increased\* throughout the colony, while upon his estates they had greatly improved, and the production of wool soon became an object of interest to the colonists generally.

In the year 1822, Captain M'Arthur obtained from the Society for the Encouragement of Arts, Manufactures, and Commerce, the large gold medal, the premium offered for importing into London 15,130 lbs. of fine wool, the produce of his flocks in New South Wales; and also the large gold medal, being the premium offered for importing the finest sample of wool, the produce of his flocks in that colony, equal to the best Saxon or Spanish wool.

The flocks of Australia having been from this period improved by the further introduction of fine Merino rams only, it may almost be said that a new breed has been produced, not dissimilar to the Anglo-Merino of Lord Western, which has been accomplished, to use his lordship's words, by "placing Merino wool upon a Leicester

carcass."

Having shortly digressed from the subject of wool-growing in Australia, for the purpose of making our readers acquainted with the first introduction of sheep, and subsequent improvement of their breed in that colony, we now revert to our original subject in detail.

The average weight of a fleece in New South Wales is stated by Dr Lang to be from 2 to  $2\frac{1}{2}$  lbs. per sheep,‡ and the average price we have stated to be 1s. 1d. per lb. Taking, therefore, an average clip to yield the latter amount, each fleece will be worth, say 2s. 9d., consequently a flock of 500 sheep would realize only 62l. exclusive of all expenses; now, without stopping to inquire whether this is sufficient to repay the settler for his outlay of capital and labour, we will at once proceed to point out how an increased quantity of wool may be obtained.

\* In 1803 the total number of sheep in the colony was 10,157.—See Collins's 'New South Wales,' p. 349. In 1817 they were 170,420.—See Wentworth's 'New South Wales.'

† Dr Lang's 'New South Wales,' vol. i, p. 351.

South Wales.'

† The samples sent to the society were sorted into three qualities, and submitted to the firm of Marsh and Ebsworth, wool-brokers, whose opinion, as recorded in the Society's 'Transactions,' vol. xi. was—" No 1 is equal to the average quality of Saxon wool denominated electoral, and which has sold in this market, during the last 12 months, from 8s. to 9s. per lb.; No 2. equal to the average Saxon wools denominated prime, and sold from 6s. 6d. to 7s. 6d. per lb.; No 3, equal to the average Saxon wools denominated seconds, and sold from 4s. 9d. to 5s. 9d. per lb."

It is well known that the main object of the settler has been to possess as extensive a flock of sheep as his means will permit. Now, instead of pursuing this course, it would be more desirable to purchase a smaller number of ewes, and, instead of buying indiscriminately an entire flock, carefully to select those which are best bred, and then to improve his flock by putting to them some good Leicester rams. By pursuing this course he would find—and this no one at all acquainted with the breeding of sheep can doubt—that the first cross would produce him a fleece of from 5 to 6 lbs. of wool, instead of the usual quantity ( $2\frac{1}{2}$  lbs.) in that country.

The wool from this cross would not be, it is allowed, of equal quality to the Merino, but the difference in that respect would be more than equalled by the increase in quantity; and a very great inducement for encouraging such a cross as recommended is the fact, that by far the most useful wool grown in this country for some years past is the middle wool, produced from a cross of the Leicester ram with the Southdown or other short-woolled ewe, the wool of the offspring of this breed deriving length and toughness of fibre from the one, and fineness and feltiness from the other; thus answering the general purposes of the manufacturer better than any other, and consequently this description of wool has latterly been much sought after, and the demand for it is increasing; it may therefore be inferred that there is little probability of any reduction in the price of the wool of such a flock, with the possibility that this description may even be worth more than the present average price of Australian wool.

In order to explain the rising importance of this particular quality, it may be necessary to explain the "Divisions of wool."

The old and apparently simple division of wool was into long or combing, and short or clothing, wool; but there was considerable difficulty in arranging some fleeces which were of intermediate lengths, and convertible to either purpose, while the change which has taken place in the construction of machinery has multiplied the purposes to which they may be devoted, and has consequently enhanced the value of this middle description. A new arrangement has therefore taken place of late years, and the division may now be classified as long, short, and middle.\*

The long wool is classed under two divisions, distinguished both

<sup>\*</sup> See Youatt on Divisions of Wool in 'Library of Useful Knowledge,' p. 97.

by the length of its staple and the fineness of fibre. The average length is about 8 inches. The first, the long-combing wool, is used for the manufacture of hard yarn, and the worsted goods for which that thread is adapted, and requires the staple to be long, fine, and little disposed to felt. The short-combing wool has, as its name implies, a shorter staple, and is finer and more felty. The felt is also closer and softer, and is chiefly used for hosiery goods.

The short wool (from which division every wool of British production save the Anglo-Merino may be considered as now excluded) consists chiefly of a rapidly-increasing importation from Australia and Van Diemen's Land, a small quantity from Russia, a decreasing one from Spain, and an amount very great, but now seeming to be stationary, from Germany. These wools are employed, unmixed, in the manufacture of the finest cloths, and, combined with a small portion of British wool, in others of inferior value. The average length of staple is about  $2\frac{1}{2}$  inches.

The middle wool is almost a new article, but it is rapidly increasing in quantity and value. From the general introduction of the Leicester ram among the flocks throughout our midland counties, an insensible change has taken place in the British short-woolled sheep, viz. the lengthening and the increased thickness of fibre, which causes this wool now to usurp the place of the short-combing wools. There is no description of the finer stuff goods in which this middle wool is not most extensively and advantageously employed; it is on this account they meet with a readier sale; and although, perhaps, they will never obtain an extravagant price, yet, considering the increased weight of each individual fleece, and also the increased weight and earlier maturity of the carcase, they will, in proportion to the value of other agricultural productions, yield a fair, remunerating price. The staple of this description of middle-woolled sheep is from  $3\frac{1}{3}$  to 5 inches in length.

Thus, it will be seen, from the increased demand for this article, that the settler, by turning his attention to the breed of which we have given a general outline, is certain to obtain a greater profit than by pursuing the present system of the Australian sheep breeders, and it requires no argument to prove that, if 500 sheep of such an improved breed will produce an equal quantity of wool to that obtained from 1,000 Merinos, and if the price, instead of being equal to the latter, was even less by 2d. per lb., that the flock master must be considerably the gainer in every respect;

inasmuch as a much smaller capital will enable him to commence, and his expenses would be considerably less; added to which, there is another important consideration connected with this subject, for, although the produce of his clip will for some time yield his only income, he would find by adopting such a breed, that so great an improvement would take place in the carcase of his sheep, both in regard to size and aptitude to fatten, that a more considerable income would be realized from the sale of his wether sheep than he could possibly obtain from. Merinos alone. That this would doubtless be the case must be well known to those who remember the attempt, about forty years ago, to introduce the Merino sheep for general use in this country. Lord Somerville, who perhaps did more towards the improvement of agriculture in this kingdom than had ever been done before, was a great advocate for their introduction, and for a few years obtained very high prices by the sale, and for the use of, his rams; yet, notwithstanding the very high price realized by the wool, viz. 4s. and 5s. per lb., and some even much higher, the breed was abandoned, owing to the smallness of size and indisposition to fatten.

It may, in conclusion, be proper to explain that, in recommending the Leicester ram, it is because the best long-woolled sheep are more commonly known by that name, but are by no means confined to that county; good long-woolled rams are to be found among the best breeders of that sort of sheep in all the midland counties, still the merits of the new Leicester sheep have been proved to be such that at the present day there are very few flocks of long-woolled sheep existing in England, Scotland, or Ireland, which are not in some degree descended from the flock of the late Mr Bakewell, to whom we are mostly indebted for the great improvement which has taken place in these valuable animals. No other breed of sheep possesses so great a disposition to fatten-no other breed of sheep is fit for the butcher at so early an age-the wether sheep, in the common course of grazing, at two years old, which is mostly the time at which they are sold, weigh from 19 to 22 lbs. the quarter, and clip from 7 to 9 lbs. of wool. The great defect in Merino sheep is, that they are narrow across the loins and light of flesh; while, on the contrary, the Leicester and other long-woolled sheep are, for the most part, wide across the loins and full of flesh, and consequently the breed most likely to remedy the deficiency in this respect of the Merino; indeed the grand secret and the most important consideration in breeding stock of every description is, to remedy any deficiency in the dam by providing a sire excelling in those points in which the dam was deficient; and, in the present state of sheep-husbandry in Australia, we think there cannot be a doubt that a cross with the Leicester will prove highly advantageous to the farmer, for if his wool no longer produces the high price it formerly did, the increase in the weight of his fleeces will go far to compensate for the diminution in price, while the improvement of the carcase must realize a larger return from the sales to the butcher.

## THE EXOTIC WORLD CAPABLE OF BEING SUCCESSFULLY IMPLANTED AND CULTIVATED IN AUSTRALIA AND NEW ZEALAND.

## No. III. THE OLIVE TREE.

Among the various products to which it is our intention to refer under this head, the cultivation of the Olive Tree is one of the most interesting and attractive, inasmuch as it has been celebrated from the earliest ages, and is the second tree which we are acquainted with, as mentioned in the sacred writings; it must have been known before the flood, as the dove returned to Noah in the ark with a leaf of that tree in her mouth, and there can hence be little doubt of this incident having been considered as the emblem of peace. This tree must have been very extensively cultivated in Judea to have furnished the vast quantities of oil which were used in the sacrifices and services of the temple, besides its general consumption as an article of food. It is recorded by a late traveller to Jerusalem as a curious fact, that after the lapse of so many centuries, and after all the changes of destiny that have been experienced by the Holy Land, olive trees should be now found growing wild in the same spot.

The olive in the Western world (says Gibbon) followed the progress of peace, of which it was considered as the symbol. Two centuries after the foundation of Rome both Italy and Africa were strangers to that useful plant; it was afterwards naturalized in those countries, and at length arrived into the heart of Spain and Gaul. The timid errors of the ancients, that it required a certain degree of heat, and could only flourish in the neighbourhood of the sea, were insensibly exploded by industry and experience.

The cultivation of this tree has always been particularly at