

of the trade is that in horses, of which 19,000 were exported from British farms and studs last year. The prices are calculated to astonish those who are not closely acquainted with the facts about pedigree stock. The Argentine bought 269 British-bred horses at an average price of £178 each, for instance, while the thirteen that went to Sweden averaged £250 each. The hackney is the most saleable type, and, with the hunter, makes up the majority of our exported horses. Heavy horses do not sell so well on the Continent, because each country has its own type; but a considerable number of Shires and Clydesdales go to Canada. In cattle and sheep there is a great opening. If kept uncrossed, a British breed of cattle will continue in its present form, whatever the conditions it may have to face. Added to which it is possible to find among our many breeds a type of animal adapted to any special surroundings or requirements. The Argentine remains still the best market for our cattle. The export of sheep to Australia has now practically ceased, because the Australian breeder has evolved a type of his own, and is, in fact, exporting in his turn. The Continent of Europe, however, is still almost an untouched field for British sheep. Mutton is very little eaten on the Continent, for the native breeds of sheep are essentially wool-bearing and not the best of meat producers; but where a demand for mutton has been temporarily created by advertisement it has persisted, and first-class British mutton has met with high favour. In all we exported 2,728 sheep for breeding in 1911, and only 984 of these went to European countries. Germany and Russia were our best customers.

MARKET GARDENING IN THE TWENTIETH CENTURY.

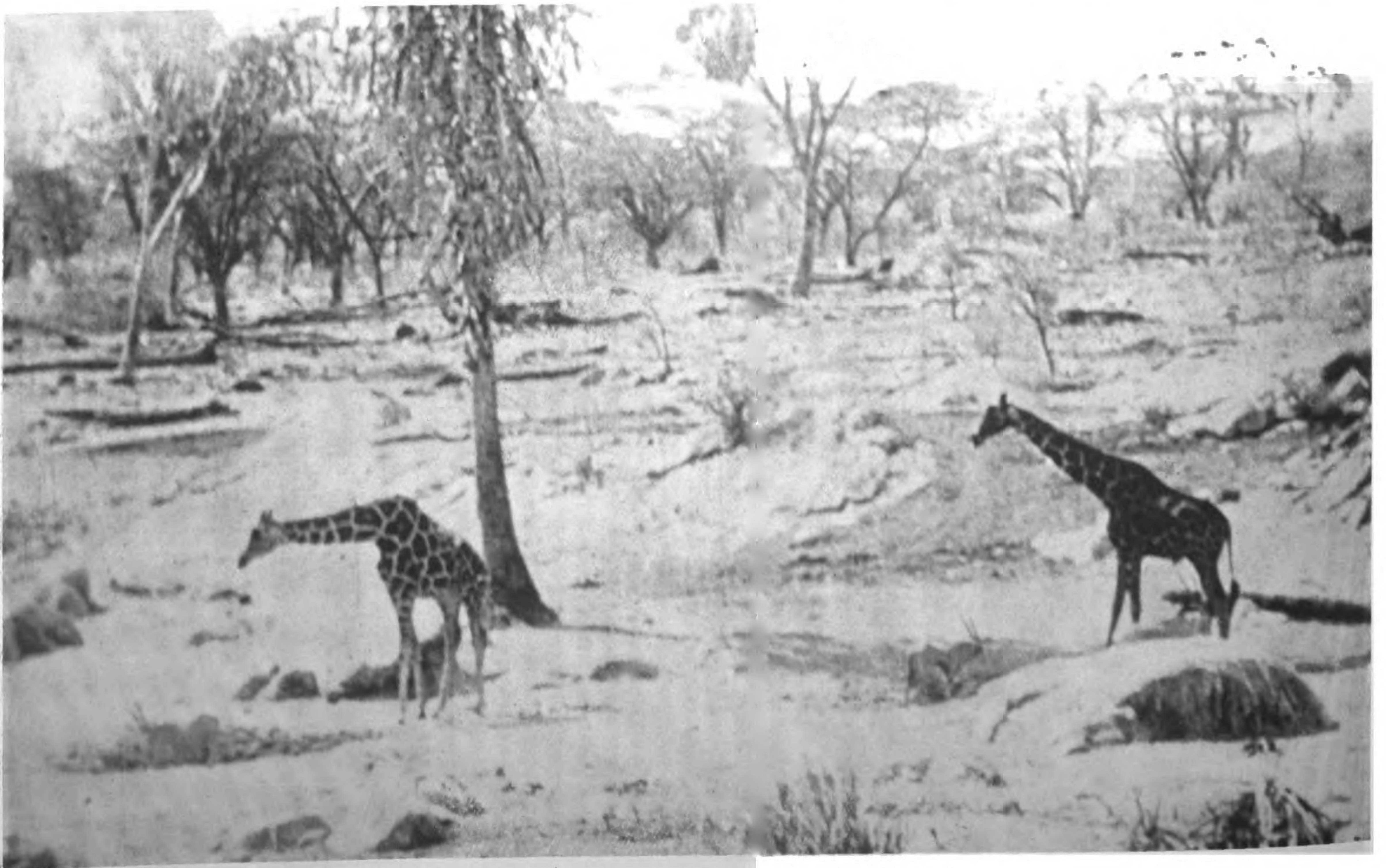
Opening a little book almost at random, we find this statement: "The profitable plan of procedure in the twentieth century is to rent or purchase a few acres of old England and increase their productive capacity to the very highest point; then the next all-important step is to co-operate in the production and distribution of all produce, for it is both chaotic and costly for twenty or twenty-five market gardeners to go up and down the same street daily in the attempt to supply ten to fifteen houses with similar

kinds of garden produce." This is all very true, but to succeed, the man must have certain other qualifications. In the first place, he must know something about the craft and business of market gardening. It is useless for him to expect to make a livelihood unless he has gained the knowledge that will enable him to grow the stuff, and after growing the stuff he must have the capacity to sell it to advantage. There are, of course, various methods of qualifying. A man may serve under a market gardener, or he may attend a good horticultural school. By this he will avoid the expense incidental to early failures. Even then there are certain handicaps and advantages to be considered. A man with a family of willing workers stands a better chance, other things being equal, than one who has to depend on his own pair of hands. Market gardening gives employment of many kinds. The youngest child and the oldest man may find something to do in it; while children between the ages of ten and eighteen are most helpful. As soon as it becomes necessary to hire, success is more difficult of achievement. Then capital is required. Every form of cultivation demands a period of waiting from the time in which the seed is placed in the ground till the produce can be sold. But progress will be greatly facilitated if more capital is possessed than is needed for simple maintenance. Land responds willingly to good treatment, and good treatment may be divided into two kinds. There is the labour which consists principally in turning over the soil and removing the weeds, and there is the expense of nourishing the land and making it more fruitful. It is calculated by the writer of "The Market Garden: How to Start and Run it Profitably," published by C. Arthur Pearson, that for every acre he possesses, the market gardener should have a capital of £20 in hand after he has stocked the land and bought the requisite tools and implements. Almost of as much consequence as the man is the position of the garden. It is an amazing advantage to have it in close proximity to a good market, or, failing that, to a railway station whence plenty of goods trains run. The soil itself ought to be fertile and so placed as to be sheltered from the cold winds and to receive a full share of the heat of the sun.

BIG GAME AND THE CINEMATOGRAPH

OUR readers will not have forgotten the remarkable sketches of hunting in South Africa which we published in our issue for October 19th and the Christmas Number. They were drawn by Mr. Lionel Edwards from photographs by Mr. Paul Rainey, an American sportsman who carried out a great hunting trip in British East Africa for the purpose of hunting lions with dogs. It might have been thought a hopeless thing to take

with him a professional cinematograph operator, but he did so, with excellent results. These have formed the subject of many picture palace shows in America during the course of last year, and have now been brought to this country, where they were publicly exhibited on Friday, January 10th. They gave much delight to all present, and indeed it was a great feat to be able to transfer the wild life of the veldt to the inside of a London music-hall. The expedition, which started from Nairobi, was



THE BEAUTIFUL MISTRUSTFUL GIRAFFES.



RHINOS AT THE WATER POOLS.

directed to the best big-game district in British East Africa, and the cinematograph brought before the audience all the salient facts of safari. Very picturesque some of these incidents were. The baggage-laden natives, looking extremely pleased at having fallen on such a good job, were in themselves very picturesque, and so were the camels that bore the heavier burdens. We are sorry not to be able to show these animals fording a river, as that, though no extraordinary occurrence, was certainly one of the most striking, and an ox-waggon dragged across a hilly horizon in a wonderful light might have been the envy of any painter. But these sights are not by any means the most extraordinary.

The great achievement was to get cinematograph photographs of the lion-hunt. There were first what we may call the tufters put into the dongas to raise the game. They were shown working a cold scent that in process of time became a hot one. Then the hounds were put on and the lion brought to bay. We are told that he does not run very far, not more than a mile and a-half at the outside, before he stops to face his pursuers. In this instance one got a good view of his wild, wary face, half shrouded by undergrowth, as the dogs yelped round and showed an eagerness to attack tempered by natural prudence. Whether they could be trusted to kill their prey or not is a matter of doubt. They are said to have done so on one or two occasions. Mr. Rainey, who is very careful of his dogs, put an end to the struggle with his gun as a general rule. The hunt of the cheetah was even more exciting than that of the lion, as this animal seeks refuge in a tree. It is shown in one of our pictures at the very top, a growling and formidable

quarry to the two hounds, which, in their eagerness, actually clambered up and began to snap and yelp at him, whereupon the cheetah sprang to the ground and was speedily the centre of a vigorous attack. His plan of defence is to lie on his back and give vigorous play to his teeth and claws.

A considerable amount of trapping was done on the expedition, the steel traps being padded to prevent excessive pain or injury to the animals, whose destination was, of course, various zoological gardens. It was the least enjoyable part of the entertainment watching them struggle in the traps or being pushed into the sack or cage in which they were to be temporarily confined. Another picture was thrilling, but open to the same objection. This was the death of a rhino which had charged the camera. The operator, evidently a man of iron nerve, had calculated on its doing so, and asked that it should not be shot till he gave the signal. A second shot was deemed necessary, but the last twitching of the animal's ears might have been omitted without loss. To our mind the glory of the pictures is to be found in those of the water-holes when the animals were coming to drink. It was a splendid feat to obtain them, and necessitated a wait of three days in a

tree by the operator. He also brought into use several interesting devices, such as that of making a false "hide" for the purpose of accustoming the animals to his paraphernalia. Those water-holes, and the drinking of the innumerable animals that visit them, have been described more than once in our pages, among others by Mr. Bryden; but words could give no description equal to that of the camera. The animals that flock in from



CHEETAH FOLLOWED UP A TREE BY DOGS.

the desert to drink these waters appear to agree to a certain truce during the period of refreshment. At the same time, they do not trust one another implicitly. The weak makes way for the strong with prudent promptitude. An excellent opportunity is afforded of studying these animals in their freedom. What struck one most about them was the lightness and grace of their tread. We are accustomed to look on the

elephant as a clumsy animal, and its limbs look peculiarly awkward as it trails them along an English road; but the family singled out for the purpose of the cinematograph showed, from the baby up to the oldest, a lightness of tread and an admirable grace. But the animals that excelled all the others in grace and beauty were the giraffes. Our photograph does not do justice to them because, instantaneous though the work of the camera may be, it cannot transfer motion to paper, and those animals which had probably come forty to fifty miles to drink at the water-hole were as restless as they were beautiful.

The male came down first, the more timid female appearing to hang back till she had received his assurance that all was safe. A shy and sensitive creature he is, ever cocking his ear at a sound or sight that appears strange to him, such as the clicking of the cinema, bending his long neck and making every movement with most exquisite grace. The female was not very long in appearing, and was even more mistrustful than the male. But no doubt the presence of so many other animals lent them assurance, just as the rhino feels safe as



THE WATER-TRUCE.

long as the birds continue pecking at his skin. There are two motions of the giraffe which are particularly interesting. One is his kicking, for which the lesser animals appear to have a profound respect. They get out of the way of it as soon as they observe the preliminary crooking of his knee. The other is his method of drinking, which is to spread out his front legs and thus lower his body so that his mouth may

get more easily to the water. Several rhinos were seen drinking, and showed signs that very little was needed to tempt them to an indulgence of their aggressive habits; but they did not fight on this occasion, although one of those photographed showed a gash on its side which had evidently been made by a larger rival. At a respectful distance from each other they departed to a wood which glimmered in the distance like some timbered waste in fairy tale. We greatly doubt if there is any other place in the world where so much wild life could be seen in so short a time as at one of those water-holes. Not only were there great carnivora and other mammals, but huge flocks of birds fluttered down to assuage their thirst before departing again to the desert. Mr. Rainey's achievement, then, is a very extraordinary one that would have scarcely occurred to any but an American brain. He is a pioneer in what is likely to prove a fruitful field of activity in the future, because what one man can do others can do also, and the studies of wild life brought from Africa are so very attractive that somebody is bound to attempt to procure more of them.



THE LION AT BAY.