to thank Mr. Harold Adelaide has Wylde for the marked impetus given by him to interest in organ music. At student concerts it is evident that there are some promising young organists coming on. Mr. Wyldes's own playing is always markedly popular, and the compositions presented by him on Monday evening had an added interest owing to their variation from works by that great master of the past, Bach, to quite modern writings. Mr. Harold Wylde's first organ solos were two compositions by Bach. First, the "Prelude in C." rendered with great delicary. Then came the "Toccata in F." full of technical difficulties and the elaborate sound-embroidery for which the great composer was noted. Mr. Wylde's interpretation showed a thorough command of the king of instruments. The elaborate and exacting pedal passages were especially notable, and as towards the close the organ speaks with full voice the effect was really fine. His next bracket opened with a descriptive writing, "The sun's even-song" (Karg-Elart), which was particularly striking, having a marked character of its own. It seemed to picture a vivid sunset. "Chant de Mai," by Jongen, came as a pleasing contrast; then, in yet another mood, there followed "Capriccio," by John Ireland, strongly characteristic and making considerable demands upon the organist. Mendelssohn's "First sonata" gave yet further opportunity for varied tonal colouring. The opening movement, "Alergo moderato e serioso," with the suggestion of church music heard at intervals through the storm. The first theme was finely handled, and through each succeeding movement right up to the striking and dramatic climax impressiveness and effect of the work increased. It made a fitting close to a fine recital, Mr. Wylde also accompanied the vocal numbers, his intuition and sympathetic playing being delight-

> Register THE ANGLO-EGYPTIAN SUDAN.

ful

A Triumph of British Administration.

1 .- By Cecil T. Madigan, M.A. Prior to becoming Lecturer in Geology in the University of Adelaide, the writer of this article and another which will follow it was Assistant Geologist to the Sudan Geological Survey. His duties in that connection carried him from the headquarters at Khartoum into Abyssinia and down the Red Sea coast, and included three protracted reconnaissances executed during 1920 and 1921, which involved some 2,000 miles of camel treking. Mr. Madigan is therefore well qualified to discuss the Sudanese question now at issue between Britain and Egypt.

and it was obvious that the whole ques people. tion of the Sudan would be reopened by The present state of the Sudan is a perthe Egyptians with the hope of increasing feet triumph of British administration their powers there. To the Egyptian the over naitye races. The best class of young Sudan is morely a place from the over naitye races. Sudan is merely a place from which wealth Briton has always been chosen for the can be extorted. Any lessening of Bri-civil service-many from Oxford and Camtish control there would be disastrons to bridge. The finest traditions were set up the Sudanese, who realize this only too by the first Government, and have been well. The last Egyptian administration is faithfully followed. All the experience of Sudanese and the years last this British rule in India and over other Sudanese, and the very last thing they coloured races was brought to bear in this ploitation of arid lands. The proper study desire is a return to it in any form. The coloured races was brought to bear in this ploitation of arid lands. The proper study Egyptians and Sudanese are hereditare new field, and the administration was of their vegetation was believed to be of Hading Egyptians, who have been alter- the Sudan. Sir Reginald Wingate was attached, when ditions led a precarious existence. If Ished,

Historical Review.

families had disappeared, and soon only a the Egyptian Army proper, stationed in small sect—the Copts—who had embraced the various military districts of the Sudan. Christianity, remained of the ancient

obtaining An annual tribute only was Turkey. paid to Turkey, and this continued up to the outbreak of the Great War, when all connection with Turkey was broken. The successors of Mohammed Ali soon threw Egypt into hopeless financial chaos through typical Egyptian administration, which consists in all officials obtaining all they can for themselves and the devil take the hindmost. Self-seeking, bribery, and corruption are the keynote of their methods. European interests were deeply involved in the financial ruin of Egypt, and, the French refusing to join, the British in 1882 took action to extricate the Khedive (Tewfik) from his difficulties, as his Minister of War (Arabi Bey) was in open rebellion against European influences. The bombardment of Alexandria and the battle of Tel-el-Kebir followed. English officials were placed at the head of departments, where they have remained till quite recently.

Mahdi and Khalifa. A year before this the Mahdi had started his revolution against the Egyptians in the Sudan. He proclaimed himself the expected Messiah, and soon obtained a large following. Religious fanaticism, however, was by no means the only reason for the great rally of the tribes to his cause, muny of them never believing that he was the true Messiah. The chief cause of the success of the insurrection was hatred of the Government and the venality of the Egyptian officials, with their oppressive methods of for "Guide") was a clever and able leader, and made full use of his hatred. He practically ended the Egyptian power by the annihilation of Gen. Hicks's army of 10,000 in 1883, when the Governor-General of the Sudan (Ala el Din) and Gen. Hicks himself were killed. In 1884 Gen. Gordon was reappointed Governor-General of the Sudan, having held the position before from 1877 to 1879. He had retired from the service at the time of this appointment. He was the first European to be Governor-General, all others having been Egyptians. Gordon was sent down to carry out the evacuation of the Sudan. Up to the time of Kitchener's expedition no British troops had been used in the Sudan, though there were many European officers in the Egyptian Army. The story of the siege of Khartoum and the murder of Gor-

don in 1885 is well known. After the fall of Khartoum a terrible reign of fire and sword began, which lasted 14 years and decimated the population of the Sudan. It transcended even the werse an ags of the Egyptians- or of the Turks, for many of the higher military and administrative officers on the Egyptian services were Turks. Many tribes broke away from the Mahdi, and many had never intended to bow beneath him, though anxious to be vid of the Egyptians All who did not follow his religion and all who opposed him were to be destroyed. He enforced by terr ble pumplement a most strict moral code based on the Koran. Punishment was by death or mutilation, and degrees of punishment were by the number of limbs cut off the offender. Smoking was punishable by having a hand cut off. There were dozens of executions daily in Khartoum, and the country literally ran blood. The Mahdi died a natural death, and was succeeded by the Khalifa, who governed on similar lines.

Deliverance from Bondage. When conditions were finally stabilized in Egypt, a joint British and Egyptian Expeditionary Force under Kitchener was sent up the Nile to free the Sudan from this reign of terror. The Khalifa's forces were routed at Omdurman in 1898, and peace was goon restored, a peace such as no Sudanese had ever before known It is only 26 years since those black and Every one with a knowledge of the bloody times, yet hardly a trace remains. Anglo-Egyptian Sudan will have read with Where once large armed parties went out great satisfaction that the present British spreading fear and often death, to exact Government means to retain firmly its everything possible from the scattered administration in the Sudan. The re-villages, now the British official goes peacecently acquired independence of Egypt has fully alone with his half-dozen camels, and complicated the position in the Sudan is met and welcomed by the sheikh and

Egyptians and Sudanese are hereditary made a model one. At first it was entirely enemies, and the story of the Sudan is a military administration, organized by one of continual struggle with the in- Kitchener, who did not remain long in Major-General Sir H. Lee Stack was ap human interference, whether direct or by pointed; and he still holds the position, the grazing of animals, pressed too hardly It is interesting at this point to glance The military officers have gradually been Ever the latter part of the history of replaced in the administration by civilians, peared, and those that could take their Egypt and the Sudan. In the 7th cen, and now only six of the 15 Governors of place were less valuable. An efficient thry there was a great Mohammedan in provinces are military officers, while alvasion of Northern Africa. The Romans most all the remaining officials are British were driven out, and the Arabs spread civilians. Only one battalion of British all along the Mediterranean to Morocco troops is now stationed in the Sudan, at and up the Nile into the Sudan. Long Khartoum. There are seven Sudanese batere this all traces of the old Egyptian talions of the Egyptian Army, and most of

Great Achievements.

height in the 12th century under Selah each under a governor, and the provinces east district. This country was far from of the Crusaders. Their rule opponent are subdivided into districts under the being a "desert," for it had a remarkably of the Crusaders. Their rule continued control of inspectors, British officials rich flora, even in those portions which up to the 16th century, when Egypt was from among whom the governors are were as yet unsettled-for example, the Sultan Selim, and the Trebe bald where chosen as vacancies occur. In each dis- western part of the Barrier. Occupation. Sultan Selim, and the Turks held sway trict there are one or more Marmurias in however, was not on account of lack of till early in the 19th century, when charge of a Marmur. The Marmur is an fodder plants. Mohammed All arose and succeeded in Egyptian, directly responsible to the in-

foodd. partial independence troth spector. He has powers comparable water those of a country Magistrate in South Australia, and is the highest Egyptian official in the service. His duties are laid down for him, and he assists in an administartion in the framing of which he can take no part. Everything be does is carefully supervised by the inspector, who himself deals with all but trivial routine matters. The influence of Egypt in the administration since Kitchener's time has been negligible.

In the short period of 20 years of the British control, order, peace and prosperity have grown out of chaos. Agriculture almost ceased under the Mahdi and Khalifa; wells were filled in all over the country; and whole villages disappeared. Many devastated areas are now re-settled. In many cases the well sites had been lost, and patient search had to be carried out to re-locate them, when Government assistance would be given to sink new wells, often with the help of well-boring machinery. Fifteen thousand miles of railway have been built; a main north and south line from Wadi Halfa in the north to El Obeid in the south, with an eastern branch to Port Sudan, where a well-equipped harbour has been constructed, giving a much better outlet to the Sudan than the long journey, including over 200 miles of river, to Mediterranean ports. Khartoum has been entirely rebuilt. Since the Great War loans have been raised for building dams in both the Blue and White Niles, with a view to regulating the water supply to Egypt and also irrigating in the Sudan. collecting taxes. The Mahdi (Arabic The Blue Nile dam is practically completed and the White Nile one well on its way. Large areas have been reticulated for growing cotton. Six millions was raised in England for the Blue Nile scheme alone.

> Ragister. 16 JUL 1924

SALTBUSH.

Professor Osborn's Lecture.

Points for Pastoralists.

Pastoralists and naturalists will be interested in the following lecture on "The saltbush," delivered by Professor T. G. B. Osborn, D.Sc., at the Prince of Wales Theatre, University Building, on Tuesday evening. The lecturer emphasized the danger of the extermination of this valuable and peculiar plant through indiscriminate grazing, and explained how it survived under abnormally dry conditions.

Professor Osborn said the plants known as saltbush are some of the most characteristic subjects of arid Australia. A number of conditions went to make up what was termed an arid-climate. Of these the existence of a low rainfall was most important. A rough definition might be that an arid area was one having a 10.00 in. or under annual rainfall. On such a distinction no less than five-sixths of South Australia was arid. In round figures, out of our total area of 380,000 square miles, no fewer than 317,000 had only 10,00 in. of rain or under a year. This feature of our climate was either ignored by many people or regarded as something uncomplimentary to our State, and as such not to be mentioned by good patriots. These attitudes were believed by him to be mistaken, knowing that the considerable part of the State's wealth was derived from the exgreat importance, not only because of its scientific interest, but also because of the economic conditions that would result. upon these plant societies they were destroyed. Plants growing naturally disapexploitation of arid areas from the grazing point of view meant that the natural vegetation must suffer as little as possible. Throughout much of arid South Australia grew the well-known salt and blue bushes. Especially was this so in a belt of country extending from the Nullarbor Plain on the west, across the whole width of the State to the Barrier Range, and includ-Egyptians. Saracen power was at its The country is divided into 15 provinces, ling much of the Murray basin—the north-

Inree Classes of Plant Life. Plant life in the saltbush country might be conveniently grouped in three classes. the professor pointed out. First there were the natural grasses and nowering herbs. These grew in amazing numbers after suitably heavy rains. However, they as quickly died away, and passing into seed they formed no permanent plant societies to fix the soil. The abundance of natural grasses after suitable rains was a characteristic feature of many true deserts. Valuable as such grasses might be for feed, it was merely temporary. To maintain a large animal population in the area longer-lived fodder plants were needed. This was especially true where, in much of arid South Australia, we had drought extending over a period of years, and not a regular alternation of wet and dry seasons. Secondly, there were many low trees and woody shrubs. Many of these were edible, such as the mulga and sandalwood (Myoporum). The combined effect of sheep and rabbits had been to destroy the seedlings of these plants. Unless some measures could be taken to allow of seedlings to be established, the ultimate extermination of such valuable plants as the mulga and sandalwood could only be a matter of time, particularly as mistletoes of various kinds had become thick on old plants. Less palatable shrubs, on the other hand, did not suffer to the same degree. Lastly, there were many kinds of half-shrubby juicy-leafed plantssalt and blue bushes. These formed the most important plant covering on sometimes vast areas. They were all more or less edible, but varied greatly in their palatability and feeding value.

Danger of Extermination. Therefore, if heavily grazed, the more nutritious kinds tended to be eaten out because they were more palatable. In extreme cases they might wholly disappear, When this was so, inedible plants, such as mallee weeds (Zygophyllum) took the place of saltbush, or even no permanent vegetation might grow. The effect of enting out saltbush did, it was true, make room for more grasses, but as these were only annuals there might be long periods when the area was little better than a "desert." The term "desert" was rightly unpopular with Australians when applied to most of our interior. It was certainly a slander on our saltbush country, so far is its natural condition went, but heavy

stocking might so seriously alter the plant communities that a condition very close to hat of drought might result. Why Saltbush is Salt!

It was a widespread mistake to presume hat saltbush was sait because of the sait n the soil, the lecturer said. Analyses howed that the best kinds of saltbushes ourished in soils containing very little alt only. There might not be more than 05 per cent. The quantity of salt-someimes a surprisingly great quantity-was ound in the leaves of saltbushes. There night be as much as 30 per cent. of the lry weight. This indicated that these plants had a remarkable power of extracting salt from the soil. This salt in the caves had been shown by experiments conducted in the Adelaide University botam-

cal department to aid the plants in absorbing water through their leaves from dew or very light rains. Saltbushes were thus able to benefit by rainfalls that were too small in amount to affect the roots. Many of the plants growing in arid regions of South Africa and the United States of America commonly stored water in their leaves or stems, which thus became very fleshy. Such succulences were surprisingly rare in arid South Australia, However, the Australian saltbushes, because of their remarkable power to take water throng the leaves could utilize the light falls of rain that were such features of our arid Views of Saltbush Country,

The lecturer illustrated his remarks by interesting lantern slides from photographs taken by him at Oolden on the edge of the Nullarbor Plain, portion of the Quora district, in the north-east rauging from the Murray up to Lake Frome, and also during a trip from Marce to Cooper's Creek.