

Adventurer June 14/16

MODERN GUNS.

People now live almost amid the smoke of gunpowder. The man in the street talks of big guns and calibre and trajectory and range and projectiles as if he knew a good deal about these subjects. But really few people know anything more about guns than that the British nation has the weapon with the greatest range and most tremendous striking power. Consequently the lectures of Professor Chapman on the subject of big guns are a source of public enlightenment. The lecturer, in the second of his discourses in the Prince of Wales theatre, Adelaide University, last evening entered upon an interesting stage. He said the guns he had described in the first lecture were capable of firing a rounded projectile only to a comparatively limited range. Even at Waterloo a distance of about 1,200 yards was all that separated the combatants at the beginning of battle, and they approached to within 200 or 300 yards before either side suffered very severely from musketry or gun fire. Nelson fought his ships almost side by side with the enemy. When a suggestion was made to the great admiral that sights would be a useful addition to his guns, he retorted contemptuously that he hoped "our ships will be able to get so close to the enemy that our shots cannot miss the object." The main armament of the Victory comprised 42-pounders and 32-pounder carronades—"smashers" they were called in the service—which were effective only at ranges up to 500 or 600 yards. In contrast to that, last year the Queen Elizabeth fired shells over the hills of Gallipoli Peninsula, a distance, according to the Admiralty report, of 11 1/2 miles. Firing began in the North Sea battle at 12 miles. In some of the recent land fighting much greater ranges had been attained. The main work of the destruction of the Liège forts was at a range of 14 miles. The greatest range of fire recorded in actual warfare was at the bombardment of Dunkirk by the Germans from a distance of 23 miles.

1,500 Miles an Hour.

The lecturer showed a plan of Adelaide, and explained that the shelling of Dunkirk was equivalent to shelling Adelaide from Gawler in the north, from Willunga in the south, or more than 15 miles out to sea in St. Vincent Gulf. The resistance of the air to a projectile in such flights was enormous. A wind travelling at 80 miles an hour was a hurricane, powerful enough to blow over chimneys and lift verandahs and roofs, and do all kinds of damage. But a velocity of 50 or 80, or even 100 miles an hour, was a mere nothing compared to the velocity with which a shell from a big modern gun started to move through the air—something like 1,500 miles an hour. The pressure at that speed was not merely fifteen times the pressure at 100 miles, but more like 15 times 15.

A Britisher's Discovery.

Not from a German, but from a Britisher, Professor Bashforth (for many years professor of applied mathematics at the Royal Artillery School, Woolwich), had come the fundamental knowledge that enabled the path of a modern projectile to be computed or predicted. Professor Bashforth had to struggle against much lethargy on the part of highly-placed officials with no scientific training, who consequently did not appreciate the importance of the results he was seeking to obtain. In the preface to a book published in 1873, he uttered a cry that had been echoed by many other scientists. He said "the nation has suffered incredible losses of late years from the want of proper scientific knowledge in its advisers." It was proposed to abolish the advanced class that Bashforth established to train a few special artillery officers in the scientific theory of projectiles, and it was even proposed by some that the Woolwich School of Instruction for artillery officers should be abolished because it cost the Government altogether £120,000 a year. Much of Professor Bashforth's work with the delicate chronographs that he devised was carried out at his own expense. But his tables and results were universally quoted as the basis of all that was known on the subject, and the Germans were in the present war profiting by the knowledge obtained under such disconcerting conditions by an Englishman.

What Improved Explosives Did.

Professor Chapman explained in detail the effect of air resistance, and by way of comparison, said that a test shot in 1888 from a 9.2 in. gun which travelled 12.4 miles would have travelled 32 miles had there been no air resistance. Experience indicated that to get a range of 20 miles there must be a muzzle velocity approaching 3,000 ft. a second. That had been exceeded in some modern guns. Modern guns had increased in length with the improvement of explosives. The achievement of Captain Percy Scott, of the Terrible (he was afterwards knighted and became an admiral) in mounting naval 4.7 in. guns for use in the Boer war, came in for notice, as also did the discoveries in explosives of Alfred Nobel, the renowned Swedish chemist.

The lecture was freely illustrated by means of lantern slides.

The funeral of the late Mr. Augustin Alderman took place yesterday at Brighton. It was a most impressive sight as well as a very high testimony of the esteem in which the late musician was held. A lengthy cortege left his late residence at Maturin street, Glenelg, for the Brighton Cemetery. At the graveside there were over 300 people. The chief mourners were Mr and Mrs. R. G. Alderman and the brothers. Among those present were practically every professor, teacher, and professional of the musical community of Adelaide, Sir Charles Goode, the Mayor of Glenelg (Mr. A. J. Roberts), and Mr. J. Hendry (representative of the Institution for the Blind), who was led to the graveside. The burial service was conducted by the Rev. J. Lumsden. The floral tributes covered a space of quite 25 ft. long by 20 ft. wide. Scores of wreaths were sent from private friends, and included among some were noticeable the following:—Patriotic Orchestra, organist and choristers of St. Peter's, Woman's Choral Society, students at Conservatorium, University, musical profession, Lyric Club, Tramway Band, Elder Conservatorium staff, Conservatorium string orchestra, Greater Wondergraph orchestra, Theatre Royal orchestra, Broken Hill Quartet Club, members of Bach Society, staff of Allan's, Limited; and noticeably was one from the flower-stall sellers of Rundle street and the waitresses of Balfour-Bricknell's Cafe.

Daily Herald
16. 6. 16.

ALIEN STUDENTS AT THE ADELAIDE UNIVERSITY.

Recently recommendations were made to the various State and the Commonwealth Governments by the Senate of the University of Queensland that the electoral and naturalisation laws should be reviewed. The council of the Melbourne University referred the matter to the professorial board for a report. That report was presented several days ago, and was to the effect that the matter was one in which the University in its official and corporate capacity could take no action. Any representation which should be made on the subject belonged rather to an expression of public opinion, which was best left to the individual views of the University as citizens. The board had, however, considered that the question of how far alien enemies should be admitted to the University course and degrees might be taken into consideration by the Government, and suggested that a copy of the report should be forwarded to the Government. Professor Harrison Moore was reported in the Melbourne "Age" as having said "that the board considered it had no power to remove the names of enemy graduates from its roll, as was suggested by the Adelaide University." Enquiries from the Registrar of the Adelaide University (Mr. C. R. Hodge) elicited the fact that similar proposals were made to the Adelaide University by the Queensland institution as were made to the Melbourne University, and that the reply sent was practically on all fours with the reply of the Melbourne council, viz., that it was a political question, with which the council felt it could not deal. The council of the local University also considered whether enemy graduates who had already been admitted should be struck off the roll, but no conclusion was arrived at, nor was any suggestion made. In reply to a query as to whether the matter would be further discussed, Mr. Hodge said he could not say. Mr. Hodge went on to say that the statement that the Adelaide University had suggested the removal of the names of enemy graduates from the roll was incorrect. In March last the question was brought under the notice of the council of the University, in connection with certain foreign visitors with the members of the British Science Association, the outcome being that the Universities of Melbourne and Sydney were communicated with, pointing out that the question had been discussed, and asking whether any information on the subject could be supplied. That was all that was done in the matter.

Advertiser

16.6.16.

UNIVERSITIES AND ALIENS.

To the Editor.

Sir—In "The Advertiser" of the 13th inst., under the heading "Universities and Aliens," an account is given of a meeting of the council of the University of Melbourne, at which a report from the professorial board in regard to this question was discussed. Professor Harrison Moore is reported to have said that "the board considered it had no power to remove the names of enemy graduates from its roll, as was suggested by the Adelaide University." In March last this question was brought under the notice of the council of the Adelaide University in connection with certain foreign visitors with the British Association, and as a result we wrote to the Universities of Melbourne and Sydney as follows:—"The Council of this University has recently had under consideration the question whether the names of enemy subjects should be allowed to remain on the University roll of graduates. I have been directed to ask whether the same question has been considered by your University, and whether you can kindly supply any information which will assist the council in coming to a decision in this matter." You will see from this letter that the University of Adelaide did not "suggest" removing the names of enemy graduates from its roll. The statement in "The Advertiser" therefore conveys a wrong impression, and it appears as if Professor Harrison Moore has been incorrectly reported.—I am, &c.,

CHAS. R. HODGE, Registrar,
University of Adelaide, June 14, 1916.

Register

17.6.16.

ALIEN STUDENTS.

A telegram in The Register recently intimated that recommendations had been made to the State and Commonwealth Governments by the Senate of the University of Queensland that the electoral and naturalisation laws should be reviewed. In a report to the council of the Melbourne University the Professorial Board asserted that the question was one in which the university in its corporate and official capacity could take no action. However, the board did not hesitate to express an opinion that the Ministry should consider how far alien enemies should be admitted to the university course and degrees. In conversation with the Registrar of the Adelaide University (Mr. C. R. Hodge), a reporter learned that proposals similar to those submitted to the Melbourne University by the Queensland senate had been made to the North terrace institution, and that the reply sent was on the lines of the Melbourne University council's answer—that the question was political and one not for the council. Whether enemy graduates who had already been admitted should be struck off the roll was another matter discussed, but no conclusion was reached. It was not true, remarked Mr. Hodge, that the Adelaide University had suggested the removal of the names of enemy graduates.