

THE BROCK BULLET CLAIM

THE Royal Commission on Awards to Inventors sat at No. 2, Queen Anne's Gate Buildings, Westminster, on June 30, Mr. Justice Sargant presiding, when amongst the claims was one on behalf of Mrs. Brock, widow of Commander Brock, in respect of the Brock bullet, which was used in attacking and destroying Zeppelins.

Mr. Albert, a brother-in-law of the late Com. Brock, appeared on behalf of the claimant, and stated that the claim was brought on the definite instructions of Com. Brock, contained in a letter written a few days before he went to Zeebrugge, where he lost his life. It was due to his memory that there should be the fullest public recognition and acknowledgment of what was admitted to be a very valuable invention.

The Brock bullet had not been patented, and no one who knew the late Com. Brock would be the least surprised at that. He was glad to think that the State had unrestricted use of the invention. Apart from that, he was a man of many parts, and as soon as he had achieved success in one direction he turned his attention to another. Com. Brock had remarked that he had finished the Zeppelins, and he was going to do the same thing to the submarines. In 1916 a Conference awarded certain marks to the different types of bullets, taking into consideration the perseverance of the inventor, the civil and military value, and the restoration of public confidence. That Committee decided that the Brock bullet was worth 31½ per cent, and the Pomeroy bullet 35 per cent.

Mr. Trevor Watson: It was agreed at that time that a Zeppelin should be taken at an arbitrary value of £70,000.

Mr. Albert referred to the history of the invention, and said that it was believed at one time that the Germans had found some means of countering an attack with the bullets then in use, and Com. Brock set to work to find a bullet which would effectively function upon striking the fabric of the Zeppelin. It was in the summer or autumn of 1916 that the first three or four Zeppelins were brought down. A note which had been found among Com. Brock's papers showed that he believed that his bullet had succeeded in firing a balloon at 200 yards' range; that his bullet had been present in every mixture of bullets used against Zeppelins, and that it was the chief factor in destroying the menace.

Com. Brock had attached to his papers two reports by well-known airmen, Lieuts. Sowrey and Brandon. The former wrote that his first two drums of ammunition had apparently no effect, while the third caused the envelope to catch fire in several places. He fired traversing fire along the envelope. That, said Mr. Albert, was very important, because the Pomeroy bullet would only function against a hard substance, and when fire was traversed along the envelope, the Pomeroy bullet, to say the least, had a remote chance of hitting a hard substance.

It was a great misfortune that Lieut. Robinson was dead, because he was the one officer who had congratulated Com. Brock on the success of his bullet. It was known quite well in Com. Brock's family that Lieut. Robinson and his squadron accepted as a fact that the Brock bullet had brought down the Zeppelin. It had been testified that the first three German Zeppelins that were destroyed were attacked with guns whose drums were filled one-third with Brock bullets.

The orders placed by the Minister of Munitions for Brock bullets were 497,000 rounds. The Admiralty had ordered 105,000 rounds. The Military Wing ordered 500,000 rounds, and 497,000 rounds were delivered. They returned 400,000 rounds to Woolwich for disposal, as they considered that the Brock bullet was too sensitive.

In 1916 the Zeppelins were not so very numerous, and our defence was not organised on a large scale. Attacking Zeppelins at night was in its infancy, and it was considered highly dangerous to order an aeroplane to attack a Zeppelin until they had got a good bullet to bring the Zeppelin down.

The Chairman: The Brock bullet was invented solely for the destruction of Zeppelins?—Yes, and it was a bullet that was necessarily restricted to home defence purposes.

Mr. Albert further pointed out that an aeroplane attacking

a Zeppelin could not get closer than a certain distance, and what was wanted was a bullet that would function more or less at a safe range. The Buckingham bullet lighted at the muzzle of the gun, while the Brock bullet functioned on impact, and was both explosive and incendiary. The greatest moral and material damage was done to the enemy when it was proved that we possessed effective counter measures. He said that it was possible for an airman to say which type of bullet was functioning when he fired a mixture of Brock, Pomeroy, and tracer bullets. If they could not say so in the case of the Brock bullet, it must be equally true in the case of the Pomeroy bullet, for which an award of £25,000 had been made.

Sir William Pope, Cambridge, giving evidence in support of the claim, said that in 1915 he met Com. Brock and discussed with him the question of the destruction of Zeppelins. The conclusion had been come to that the bullet then being used, the Pomeroy, was ineffective, and they formed the idea that the Germans had introduced some protective device. What was really required was a bullet which would fire on striking the fabric and blow a hole in the fabric of a foot in diameter, to permit the rapid escape of gas. It was quite clear that the bullet must be extremely sensitive. One point in favour of the Brock bullet must be the fact that the Military Wing had returned a large number of rounds. It was far too sensitive for the varied purposes of the Military Wing. As soon as the Brock bullet was introduced, positive results were obtained, and these could only have been obtained if the Brock bullet functioned as it was intended to function.

Col. Fellowes, R.A.F., said that he had been directly connected with the development of the bullets, and at that time the Zeppelin menace was more a naval than an army business. As far as the bullets were concerned, the Buckingham bullet would have brought down a Zeppelin, but they did not know it at the time, and he was not prepared to say that the Buckingham bullet would do it. He was under the impression that the Buckingham bullet was very much less sensitive than the Brock bullet.

The Chairman: Could one Brock bullet blow a hole in the fabric and ignite the gas at the same time?—Yes, I think one Brock bullet would destroy a Zeppelin.

The witness added that he did not think the Pomeroy bullet was sufficiently sensitive to blow a hole in the fabric.

Col. Forbes, of the Aircraft Armoury Department, said that the order was issued to load the drums with Brock, Pomeroy, and Buckingham bullets to give every one a chance. They were rather open-minded about it, he added.

The witness pointed out that, in reference to the statement that a pilot would not be able to distinguish a bullet functioning, he had been asked by the Admiralty for his opinion, and his reply was that if a pilot saw a Pomeroy and Brock explode together he would not be able to differentiate between them. He did not mean to infer anything more. There might be reasons which enabled a man to distinguish certain bullets.

Capt. R. W. B. Billingham gave evidence in regard to certain trials which were carried out shortly after the Cuffley Zeppelin was brought down. A mixture of Pomeroy and tracer bullets did not prove effective, while Brock bullets alone fired a balloon after about six shots.

Mr. Trevor Watson, on behalf of the Admiralty, paid a warm tribute to the services rendered to the country by the late Com. Brock. Nothing in his life was more characteristic of him than the manner of his leaving it. He had come to the conclusion that there was a German range-finder which was better than anything we had got, and he pleaded to be allowed to go to Zeebrugge because it would give him an opportunity of finding out. It was while he was examining this range-finder on the Mole that he met his death.

The Chairman said that he thought the case was one that the Commission ought to deal with on its merits. The decision of the Commission would be announced to the Treasury in due course.

A Canadian Air Board

UNDER the Act passed this Session the Government has appointed an Air Board, of which Mr. A. L. Sifton, Minister of Customs, is chairman, and Lieut.-Col. Biggar vice-chairman, while the other members include General Mewburn, Minister of Militia, Mr. C. C. Ballantyne, Minister for Naval Affairs, and Dr. Coulter, Deputy Postmaster-General. The

inclusion of the last-named indicates that aerial mails will be considered.

The Board has the supervision of all matters connected with aeronautics, and the control and management of aircraft necessary for the conduct of the public service, the fixing of air routes, and regulations for a commercial air service.