PERSONALITIES.

MR. HENRY V. AHRBECKER.

Hon. Secretary and Editor, 1889-1910.

To this courteous and unselfish worker, the Engineering Association of N.S.W undoubtedly owes its present position in the scientific world, more than to any other of its members.

From the very beginning of his membership he was associated in active efforts which in almost every instance were brought to a successful issue. His wide knowledge of Engineering matters, due to his association with Mort's Dock & Engineering Co. Ltd., were of inestimable value to the council. He continued in uninterrupted occupancy of the dual position of Honorary Secretary and Editor of the Proceedings from 1889 till the year of his death, in 1910. His careful management of the affairs of the Association during the period of distress in 1893-1894 carried this body through those critical years, when most other kindred associations were forced to close up. Earnest effort such as was put forward by the member could not but help to elevate the Association in the eyes of all. Many works of great importance were carried out by the Council while Mr. Ahrbecker was Hon. Secretary. The Engineering Exhibition of 1897, which, although a financial failure due to the lack of public support, could not

in any way be called a technical failure, as its value to the young engineer was of the highest order. Mr. Ahrbecker's activities extended over a period of 21 years, which speaks for itself as to the regard and confidence bestowed upon his efforts by all the members of the Association.

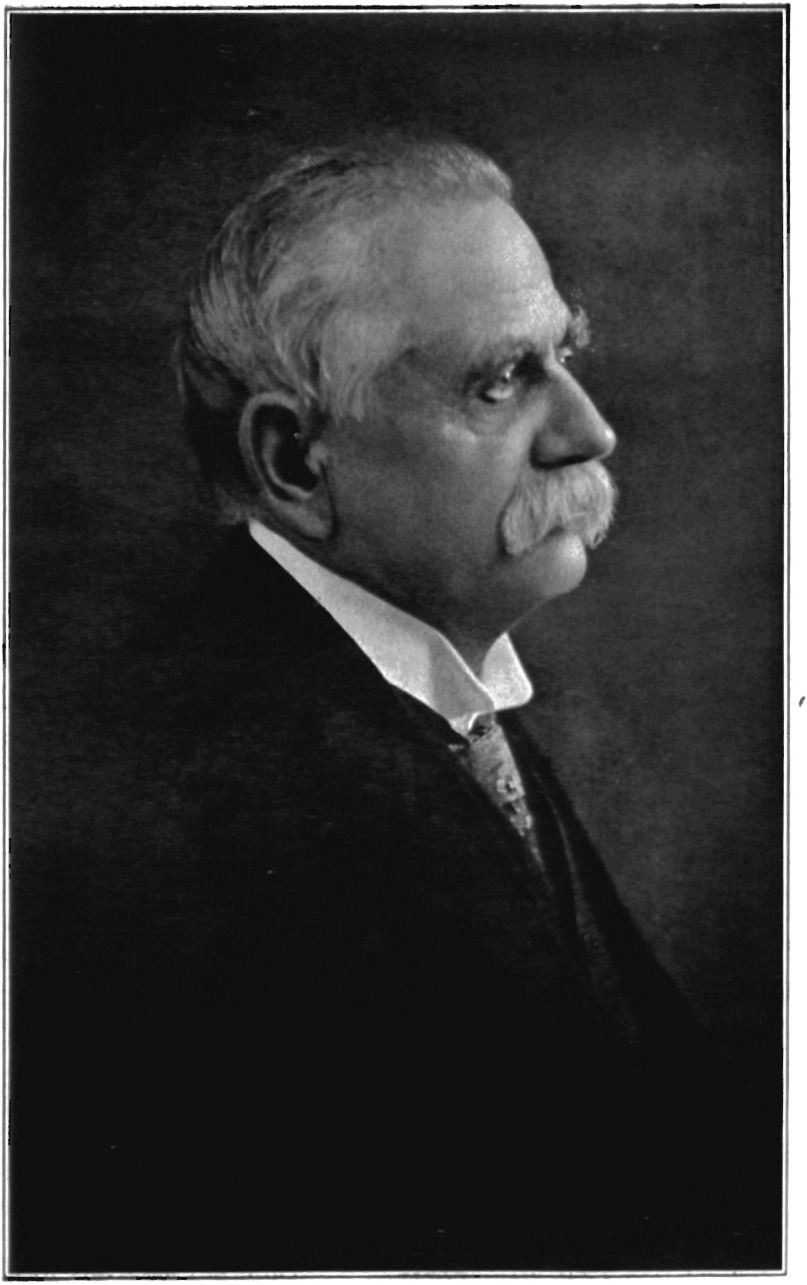
HENRY V. AHRBECKER.

Up till the time of his death in 1910, he maintained an active interest in everything connected with the Association.

MR. J. P. FRANKI.

To Mr. J. P. Franki belongs the unique distinction of having been a continuous member of this Association since its inception in 1870, he having joined up with the other 24 members to form the nucleus of an Engineering Association in that year. Originally entering the old firm of P. N. Russell & Co. as an apprentice, he later accepted a post as engineering draftsman with Messrs. Mort's Dock & Engineering Co. in 1867. He has been in continuous service with this firm up to the present time, and has evidenced his interest in the engineering profession in many way during his lifetime. It is not to be wondered at that a man of his outstanding ability should be elevated to the position of Managing Director of his firm after such a long and valuable period of work. Frequently this member has been called upon by the various Governments in power during his lifetime to serve upon Commissions and Committees dealing with matters of public importance, and his wide experience has always been of the utmost service to the community in general.

In 1917 he attained to his fifty years of service with his firm, and was entertained by the Directors and members of the executive staff at the Balmain Town Hall on January 9th, 1917. On that occasion



J. P. FRANKI.

a resume and eulogy of the work carried out under his direction was made by the chairman of the evening, when he remarked that the work undertaken by Mr. Franki covered the main features of mining machinery, bridge work, rolling-stock, locomotive, and, last but not least, the construction of steamships of all sizes and types. Although, through stress of his business dealings, not being able to take an active interest in the affairs of the Engineering Association, still at all times he was willing to set aside his duties to assist us when called upon. It is the hearty wish of the members that he be yet spared to continue his life work among us.

MR. A. J. GOLDSMITH.

An original member (No. 12 on the list) of the Engineering Association in 1870, he apparently together with Mr. J. P. Franki are the only surviving members from the first meeting. Having joined the firm of P. N. Russell & Co. in 1863 as apprentice, he had as fellow-workmen in the same firm such men as Henry Downing (later a President of the Association), David Kirkcaldy (later known for his researches into the methods of testing the strength of materials, particularly with regard to the strength and quality of mild steel and other metalliferous products used in the iron and steel industries); also Mr. Norman Selfe, perhaps one of our best-known engineers of the old school. Mr. Goldsmith's recollection dates back to the time of

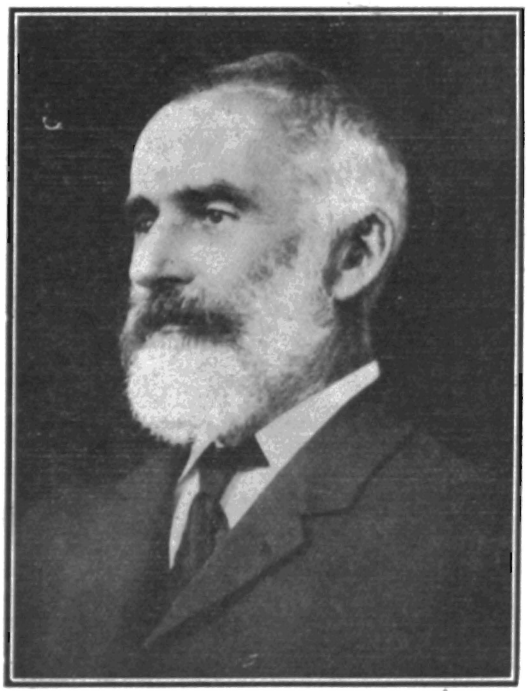
Mr. John Fyfe, senr., as first President and Mr. Fredk. Rose second President of the Association. Much interest was given about this period to the proposal to introduce compound engines and increased boiler pressures to operate the same, and although an earnest listener only at the debates that took place on this subject, Mr. Goldsmith tells us that the concensus of opinion appeared to be against the general principles of compounding low-pressure engines or the expected economies to be secured by the adoption of the principle.

Mr. Rose, as chairman of these meetings, was distinctly in favour of compounding, and as years have passed it can now be seen that the thoughts of these early engineers were in the right direction, as witness the present-day practice of compound, triple and quadruple expansion engines operated by the high pressures now in vogue. In 1874 Mr. Goldsmith was transferred from N.S.W. to the Harbours and Rivers Department of Queensland, and after completion of his work there in 1881 joined the firm of John Walker & Co., Maryborough, which in 1884 merged into the present company known as Walker's, Ltd., Maryborough, of which firm he is at present a director. Work undertaken during his period of office comprised the building of locomotives for the East-West Transcontinental Railway, shelter-deck steamers for the Commonwealth Government, and many heavy mining plant equipments, together with practically all the locally manufactured sugar milling machinery used in the Queensland sugar manufacturing centres.

A. J. GOLDSMITH

LAWRENCE HARGRAVES.

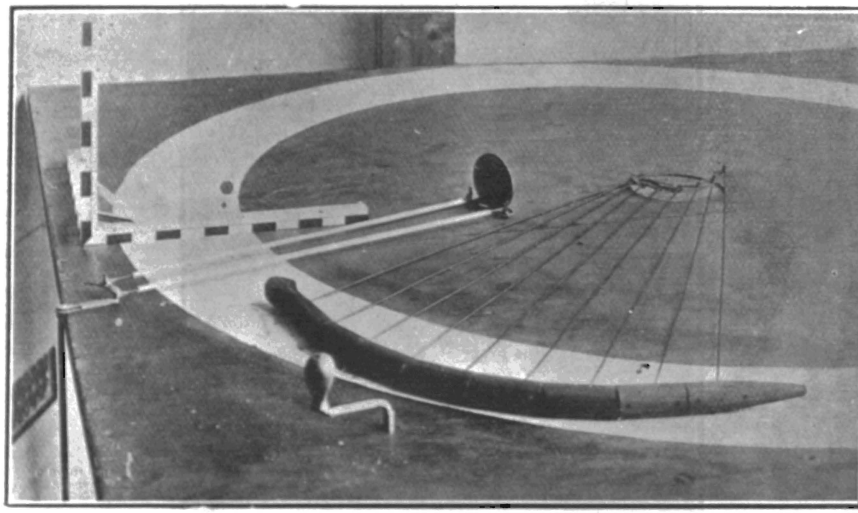
A member of the Council during '88-'89, and as one of the very early members of the Engineering Association of New South Wales he took an active



LAWRENCE HARGRAVES.

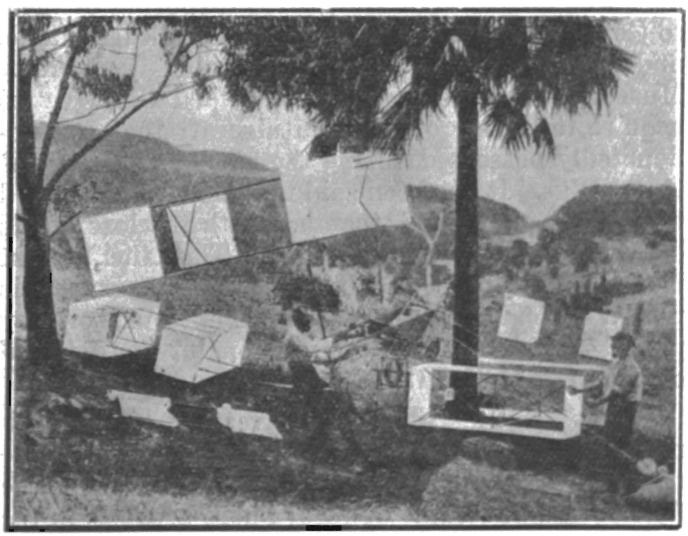
part in almost every discussion, and his efforts towards the advancement of Australian invention are only perhaps just now being recognised. Of all the subjects that this inventive genius was associated with there is no question as to which one he was most interested in; it was the much discussed one of human flight. Many had attempted to solve

this most difficult problem, and to the world generally it was looked upon with a feeling almost of derision. Early failures of Hanson, Denham, Lilienthal and others did not in any way deter this great man from formulating his method, and we now have on record how, in 1884, he invented an apparatus upon which he delivered an address before the members of the Royal Society of N.S.W., in which he repeatedly refers to "The Trochoidal



Plane"; basing his deductions upon the motion of a worm he showed that there were three motions to be considered, viz.: the vertical, the horizontal and the lateral or side to side motion. By applying his observations relative to the flight of birds to the models he had so carefully constructed, he was able in 1884 to produce a machine embodying the principle of the wing motion of a bird and which was capable of flight. This can in all probability be said to be the first successful

flying machine made. Extensive experiments were made with an apparatus which afterwards became famous in war manoeuvres as the Hargraves Box Kite. The efforts of other inventors throughout the world only seemed to quicken this great man's intelligence to produce something better, and when the Wright brothers, of America, who have always been written of and regarded as the pioneers of human flight, wrote to Hargraves



for permission to use his ideas, they were met with the courteous reply to go ahead and use all he had, for he did not dispose of his labours, but freely gave them for the benefit of mankind. So we have in 1903 the first machine by the Wright brothers—a Hargraves Box Kite—the forerunner of the Farman Bi-plane and the Voisin. (It is interesting to note that this latter was the first motor-propelled aeroplane to fly in Australia—1910).

It is a matter of regret from more ways than one that all the valuable models of not only airplanes but other engineering inventions of Hargraves should have been lost to the Australian nation through the want of recognition from those who should have been most interested. Through Mr. George Taylor the whole of these were offered to the Prime Minister, who really decided to accept them for the proposed Federal Museum to be erected at Canberra, but evidently the delay at their acceptance was the cause of Hargraves disposing of them to German agents, who quickly realized their value, and forwarded them on to Munich University Museum, where they no doubt helped Germany to acquire the pride of place in aircraft that she undoubtedly possessed during the earlier years of the Great War. It has been said that this fact hastened the end of our friend, together with the loss of his son at the Front, both in 1915. That the Wright brothers felt their indebtedness to Hargraves is placed beyond all doubt by their behaviour, for they placed the whole of their inventions at the disposal of the British War Office without fee.

It was upon many of Hargraves box kite experiments that George Taylor was able to devise the machine which made the first motorless airplane flight. This is worthy of record here because, in the light of recent events, it shows that the motorless plane was successfully in use as far back as 1909, when a flight of nearly 400 yards was accomplished (*vide* "Sydney Morning Herald," Dec. 7, 1909).

It is gratifying to note that in the "Australasian Engineer," issue of 31st May, 1922, that the Editor has fully set forth the great work done by this "The Pioneer" of aviation, and it is to be hoped that still further efforts will be made to perpetuate his memory.