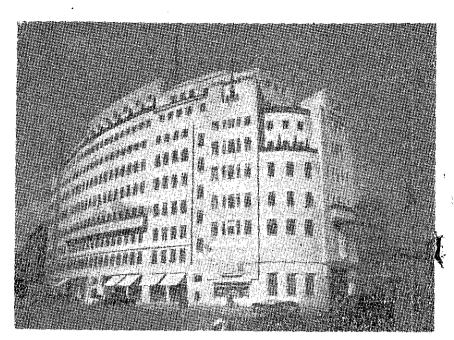
## HE MADE THE MICROPHONE

The Forgotten Story
of David Hughes
Who was too big
to bear Malice

Special to the "Record" by

E. M. DORKIN



BROADCASTING HOUSE, LONDON. Hughes made his microphone just over the road half a century before.

HESE days one hears a great deal about the genius of Marconi and the other great men of radio whose discoveries in the field of practical physics have revolutionised modern life. But few indeed, however well they may know the story of radio, know the story of the little instrument whose name is almost interchangeable with it—the microphone.

The inventor of that vital thing in the mechanics

of radio was David Hughes. Though he might well have made millions out of his invention, it is doubtful that it put a penny piece in his pocket, directly or indirectly. He gave the principle of his discovery free for the use of humanity-despite his long and bitter fight for recognition of it. The story is but another of radio's thousand and one romances.

LITTLE more than 100 years ago David Ed-

ward Hughes was born in London. When still a schoolboy he began to show an inventive and scientific turn of mind. The Hughes family later moved to America and, after taking a college course at Bardstown University, young David began to take a keen interest in music—so keen that he obtained a music professorship at the university and soon afterward gained the Chair of Natural Philosophy at the age of nineteen!

Six years after becoming Professor of Natural Philosophy he invented a type-printing telegraph which, adopted by the Western Union Telegraph Company, became the chief rival of the Morse system. The Hughes teletype was sold in France, Germany and four other European countries after baving been refused in England. That one invention made him world famous, brought him three foreign knighthoods and an Austrian

barony. And it brought Hughes nearly one million pounds in royalties.

Only his native England refused to acknowledge and appreciate David Hughes, but it was to England that Hughes returned to retire and enjoy the fruits of an active life.

THE inventor settled down in retirement at 40 Lang-

ham Place. in West End, little dreaming that years hence Broadcasting House would be built over the road — that mighty marble palace of his creation, the microphone.

Wealthy and happy as he was, Hughes could not persuade himself to abandon physical research altogether. One night, seated in front of the fire, he saw two pieces of charred wood fall out of the fireplace. The trivial incident prevoked within his fertile.

voked within his fertile brain a train of thought. Taking the charcoal with him into his laboratory he found, by experimenting, that two pieces of carbon, held in loose contact, would amplify the current sent through them.

Excited by the experiment, he set to work immediately and, with sealing wax and an empty cigar-box, constructed an instrument which he christened there and then "microphone."

IN the days that followed David Hughes perfected his invention, his chief concern being to obtain extreme sensitivity. At length be built an instrument so sensitive that the footsteps of a fly walking across a sheet of paper could be made to sound like an army marching across a bridge! He was even able to hear the same fly nibbling at a piece of sugar.

Even then the physicist was (Continued on page 41.)



DAVID HUGHES

HE MADE A FLY'S FOOT-STEPS SOUND LIKE A MARCHING ARMY.