On human skin.

The pigeon pullet in the egg.

The feces of horses and the horns of cattle.

Observations on flies, snails, guinea hens and the guinea hen pullet in the egg.

Note on tubal pregnancy.

Note on the muscles of torpedo.

The gelatin found in the cranium of "piante."

On the structure of hair, feathers and snails, bones, teeth and gout.

Observations on the ear.

The seeds of lichens, mosses and ferns.

On tides.

On the optic nerve of the swordfish and a series of other vertebrates.

Malpighi was not only an anatomist, but also a zoologist, a botanist and physiologist as well as a practicing physician. He also took interest in physics and chemistry, and was known as a chemical physician. With his wide interests went tireless industry and an indomitable spirit which was not quenched by the loss of his instruments, home and manuscripts by fire at the age of 56 but endured to the end of his active life.

It is possible that what Haeser termed his confused style and often hardly comprehensible Latin may have been a factor in the lack of a broader recognition of his many achievements in his own day and ever since then.

It stands to the undying credit of England that the Royal Society of London invited Malpighi to correspond with them, and elected him to membership. Almost all his papers written after he went to Bologna were published by that society, as Harvey's immortal work had been published in Frankfort.

Although the stirring things which happened in Malpighi's days may have spurred him on, I think that we must grant that his fruitful labors were the product of his genius and not of his day. The microscope, injections and other advances in technique were equally available to others, but no one used them to such good advantage as Malpighi. He stood at a new era, and spoke with a new voice. He was not a child of his time and his was a magic hand which illumined all it touched. His methods were objective and experimental, thoroughly modern and scientific in every way. He was an experimental, physiologic anatomist.

I have endeavored to recall very briefly some of Malpighi's services to mankind. My tribute is of necessity incomplete and inadequate, but fortunately his accomplishments speak eloquently for him. It is to these that one must turn in order to realize more fully what he did for all of us. We may not all be his friends, but all of us are his debtors.

SCIENTIFIC EVENTS

UNVEILING OF TABLET TO SIR WILLIAM AND SIR JOSEPH HOOKER

ON Sunday, August 17, in connection with the meeting of the International Congress of Botanists, a tablet was unveiled at the parish church of St. Mary's, Halesworth, East Anglia, England, in memory of the famous botanist and first director of the Royal Botanic Gardens, Kew, and his equally famous son, the second director of Kew, Sir Joseph Hooker.

The tablet was unveiled by Lieutenant-Colonel Sir David Prain, a former director of Kew, and the dedication was by the bishop of St. Edmundsbury and Ipswich, who also gave an address from the text, Psalms 104, verse 24. The bishop stressed the importance of open-mindedness on the part of ecclesiastics toward the findings of science and the equal importance of a similar attitude on the part of scientists toward religious thought and work. The Scripture lesson was read by Lord Ullswater, former speaker of the House of Commons and chairman of the tablet committee. The arrangements were carried out by Professor Oliver.

The tablet was designed by Mr. A. H. Gerard, of the department of sculpture, Slade School, University College, London. The design of the lower border of the tablet is an overlapping of the corollas of certain rock garden flowers to symbolize plants growing close to the ground. The side-border design is of conventionalized flowers of a species of heath, magnified forty times, symbolizing plants that grow up into the air. At the center of the top border is represented the sun, without which plant life would not be possible, and on this border are also five conventionalized birds, symbolizing the dissemination of seeds. The design is carved in incised relief, a method used by the Egyptians some 3,000 years ago.

Medallions of the tablet will be cast by Wedgwood to supply orders received.

Sir William Hooker lived in Halesworth when a young man, and was unsuccessful in his attempt to conduct a brewery adjacent to the family home where Sir Joseph was born. When the latter was about four years of age his father abandoned business and adopted botany as a career. In this profession it was early predicted of him that he was "likely to become a person of some importance."

Among those who attended the ceremony of unveil-

ing the tablet were two sons of Sir Joseph Hooker (neither of whom went into scientific work), and the present director and assistant director of Kew.

The inscription on the tablet reads as follows:

This tablet records the association with Halesworth of Sir William Hooker and of his son, Sir Joseph, who in succession became the directors of the Royal Botanic Gardens, Kew. Sir William Hooker lived in Halesworth from 1809 to 1820, and here Sir Joseph was born in 1817. Erected, 1930.

Those attending the exercises visited the house and room where Sir Joseph was born.

C. STUART GAGER

INTERNATIONAL SOCIETY OF EXPERIMENTAL PHONETICS

THE first Congress of the International Society of Experimental Phonetics was held at Bonn from June 10 to 15, 1930. Over 100 people attended. Addresses and demonstrations referring to all parts of the science of speech were presented.

Dr. Gutzman (Berlin) gave a striking demonstration of a Röntgen speech film in which the movements of the larynx, hyoid bone and tongue appeared with great clearness. This will shortly be combined with a speaking film so that the movements of the organs can be seen and the speech be heard at the same time. The possibilities of this method for the investigations of speech from a linguistic point of view can not be overestimated. It is also adapted to purposes of instruction, for example, of the deaf.

W. Lenk (Vienna) demonstrated a speech film apparatus suitable for laboratory use in scientific investigations. The speech may be recorded not only in the constructed form necessary for reproduction but with lengthened waves adapted to measurement. Dr. Moses (Cologne) showed that speech records vary according to the character of the person. Professor Scripture (Vienna) gave a presentation of the puff theory of the vowels. F. Janvrin (London) presented the results of an experimental analysis of a record of verse spoken by John Galsworthy himself.

Professor Isserlin (Munich) discussed aphasia; Dr. Berger (Münster) presented phonetic investigations of the Lombard Test; Dr. Kaiser (Amsterdam) showed registrations of pathologically altered voices. Dr. Hegedüs (Gödöllö) showed curves from experimental investigations on the melody of Hungary. Dr. Peters (Tartu) presented an analogous result from Esthonia.

In a paper on speech atoms and speech molecules Professor Scripture demonstrated that speech consists of a series of minute portions which for the purpose in hand can be treated as constant; these he termed "speech atoms." The combination of speech atoms into larger units such as words, sentences and so on he termed "speech molecules," according to the definition that a speech molecule is any portion of speech spoken as a unit. He showed that speech atoms influence one another when combined into molecules; the forces that act were termed "intramolecular forces." The fact that a speech atom in the latter part of a molecule can influence atoms that preceded it was considered to be a proof that each molecule was present as a whole at some time previously in the unconscious mind.

The exhibition included various oscillographs, film apparatus, graphic registration apparatus, harmonic analyzers and numerous other devices. An account of the proceedings will be published as a separate volume.

At a meeting of the council, the secretarial bureau was definitely located at 73 Welbeck Street, London, W.1, and arrangements were made to send the following publications free of charge to the members: *Zeitschrift für Experimentalphonetik, Bulletin of the International Society of Experimental Phonetics, Bulletin de la Société Internationale de Phonétique Expérimentale* and *Sprachneurologische Mitteilungen.* The membership fee was fixed at 10 shillings per annum.

Professor Hugo Pipping (Helsingfors) has been made an honorary member of the society.

THE INTERNATIONAL HORTICULTURAL CONGRESS

AT the last session of the International Horticultural Congress, on August 15, Dr. M. J. Sirks, honorable secretary, presented the report of the committee on nomenclature, whose resolutions included the following:

A list of names valid at the time it is made should be drawn up and should be good for, say, six years. It is imperative that this list should follow strictly the rules of botanical nomenclature so far as species and botanical varieties are concerned, and that the names of plants generally accepted as conformable to the rules at the time of the making of the list should alone be used. All personal preferences and individual usage must be sunk if not in conformity with these rules. This list should be used universally in catalogues, horticultural literature, and gardens for a fixed period. An international committee should be appointed to revise this list in the light of botanical research at intervals of six years. Such alterations as are admitted at these revisions should be shown thereafter in catalogues for the next period with the superseded name as synonym.

It was added that so far as possible names of horticultural varieties should consist of a single word; the employment of not more than three words is per-