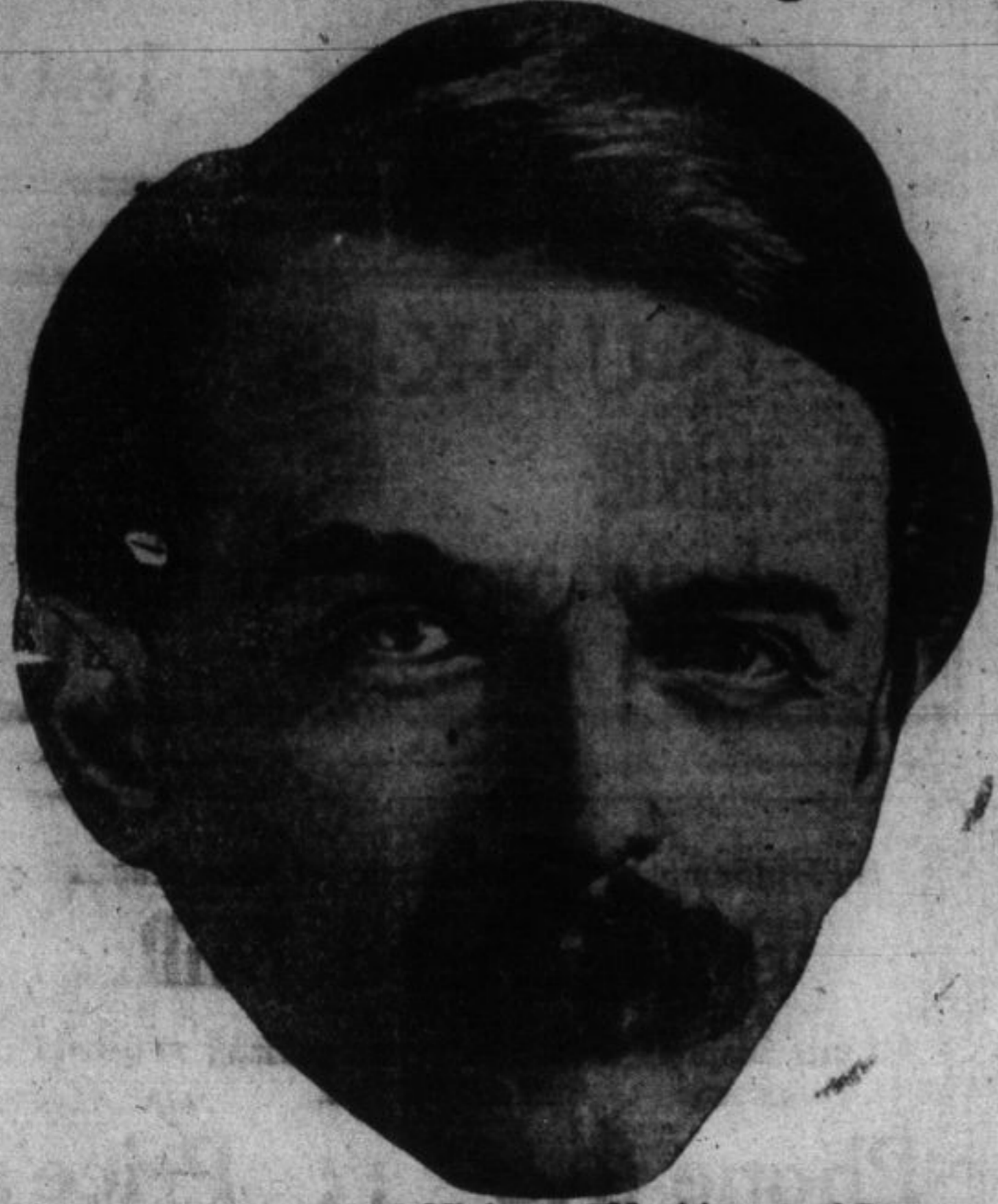


What a Study of British and German Types of Skulls Reveals

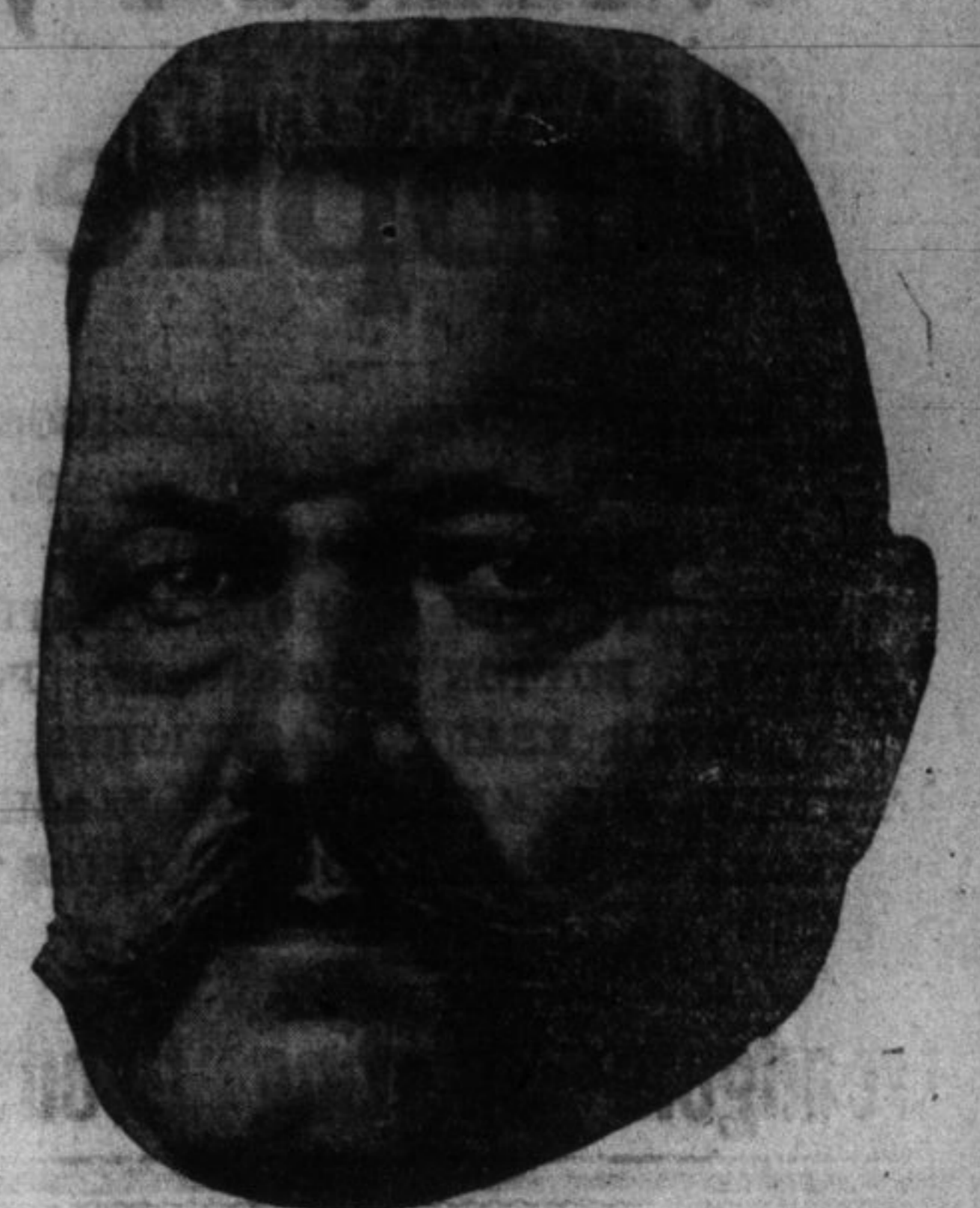
Prof. Keith, the Anthropologist, Explains Why the Head of General von Hindenburg, the Prussian Ideal, Shows the Predominance of Brute Force—While Mr. Lloyd-George's, the British Ideal, Shows the Predominance of Intellectual Faculties



Mr. Lloyd-George, British Minister of Munitions, and Diagram Showing His "Facial Angle," Which the Anthropologist Recognizes as Indicating High Intellectual and Reasoning Power Rather Than Brute Force and Physical Power.



"Professor Keith Found That the Typical German Skull, as Represented by General von Hindenburg, Was Marked by a Projecting Jaw and a Somewhat Retreating Forehead, While the English Type, Represented by Lloyd George, Had a Larger Forehead and a Slighter Jaw."



General von Hindenburg, Germany's Greatest General, and His "Facial Angle," Showing Massive Development of the Lower Part of His Face, Which Indicates Strong Animal Qualities Rather Than Intellectual Powers

PROFESSOR ARTHUR KEITH, M. D., Hunterian Professor of Anatomy in the Royal College of Surgeons of England, has been carrying on a remarkable comparison of the skulls of representative Englishmen and Germans.

The professor is one of the best-known anthropologists in England and is especially noted as an authority on skulls. He measured, restored and established the age of the famous Pitdown skull, the most interesting relic of prehistoric man found in England.

In making his present investigation he estimated the skull measurements of representative Germans, including General von Hindenburg, General von Mackensen and General von Kluck, and compared them with those of a number of representative Englishmen, including Lloyd George, the most aggressive politician in the English Cabinet; Prime Minister Asquith, Earl Kitchener and General Sir Douglas Haig, the new commander of the British army in France.

As a result Professor Keith announces that the representative German skull is essentially different from the English skull in that the German skull is marked by a square form and somewhat retreating forehead, with a heavy projecting jaw of the type known to science as "prognathous," while the Englishman of the ruling class has a long head, a more highly developed forehead and a comparatively slight jaw.

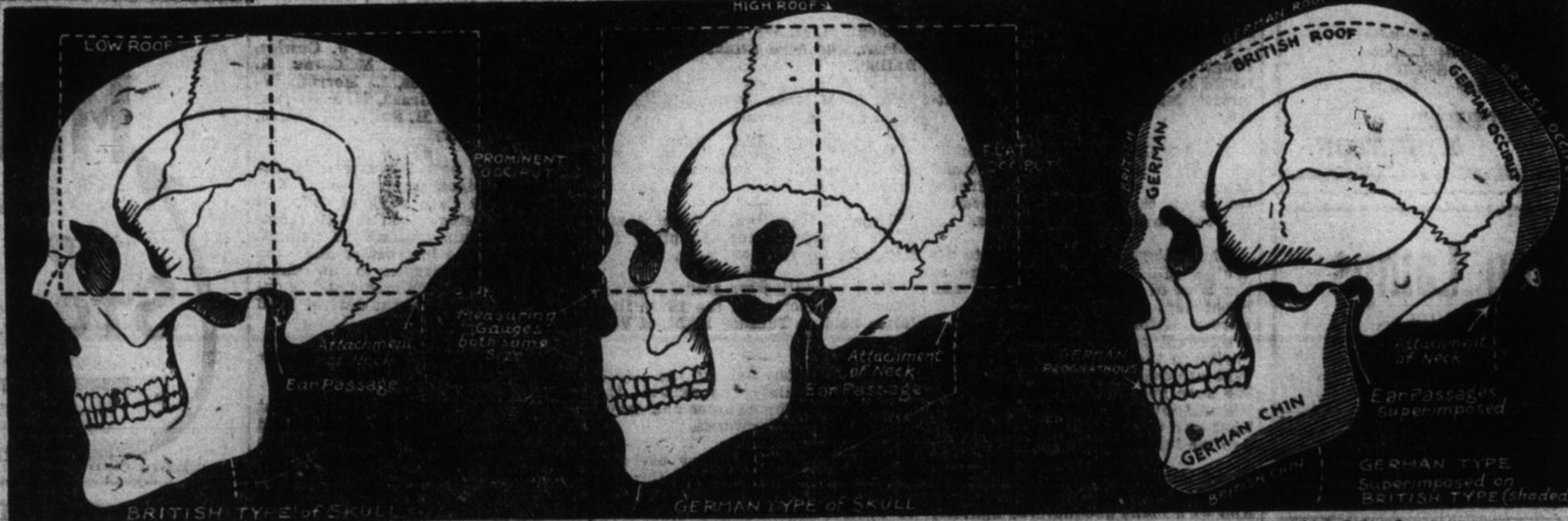
In other words, the Englishman represents a more advanced type, while the German is nearer to the primitive man, such, for instance, as the Neanderthal or the Pitdown man. It is a fundamental of anthropologic science that a large forehead with a comparatively small jaw is an indication of progress in the scale of evolution and racial maturity. The heavy jaws of the lower races are partly attributable to chewing great quantities of coarse food, while at the same time the great development of the jaw and face muscles due to this action checks the development of the top of the skull.

In the more advanced and mature races the moderate use of well cooked food through many generations and the long separation in habits and environment from the primitive type that hunted and devoured its food raw have produced a finer and higher type of jaw and favored the development of the forehead and top of the skull.

One reason for Professor Keith's investigation was to decide the question whether the Englishman belongs to the same race as the German.

Is it a fact that one Teutonic race is fighting its racial cousin for the domination of Europe?

It is known, of course, that the Anglo-Saxons, who colonized England about the eighth century, were a Teutonic—otherwise a Germanic—tribe from the shores of Germany touching upon the North Sea. It is believed, upon reasonable grounds, that England to-day is mainly Anglo-Saxon, in spite of a



Long-head Versus Short-head: Opposite Types of Humanity Which Are Fighting for Opposite Ideals.

"The fact is, we and the Germans have skulls that are made differently. They are proud of it, and so are we," said M. Pichon recently, and the remark is equally true in our own case, as is clearly shown in the above diagrams, which contrast the dolichocephalic, or long-headed, Briton, with the brachycephalic, or short-headed, Teuton."—Prof. Arthur Keith.

large admixture of Celtic and other racial elements. It is, therefore, assumed by the majority of persons familiar with history that the dominating strains in England and Germany are the same—that is, Teutonic. Professor Keith, as has been seen, has completely upset this view, and his arguments, as far as they are based on measurements, are unanswerable. If modern Englishmen are mainly Anglo-Saxon and of German origin, then it seems that a new and different racial type must have arisen in Germany.

Professor Keith's investigation is mainly based on the skull of General von Hindenburg, the most successful commander in the German army and literally the idol of Prussia, for a colossal wooden statue of him has been erected in Berlin. There is little doubt that the majority of Germans would accept him as the best representative of their nation to-day.

A profile portrait of General von Hindenburg shows very plainly the characteristics of heavy, prognathous jaw, retreating forehead and square-headedness, which the professor finds in the prevailing German type. The same characteristics appear in the other leading Germans, but General von Hindenburg shows them in a more marked degree.

The leading representative of the English type is David Lloyd George, at present holding the position of Minister of War Munitions, and admittedly the greatest driving force in the British Government. Mr. Lloyd George was distinguished before the war for having done more to improve the condition of British working people than any other man. It is reasonable to take him as a representative of English public life, since military science is not the chief interest of England as of Germany.

Professor Keith gives an interesting technical analysis of the dif-

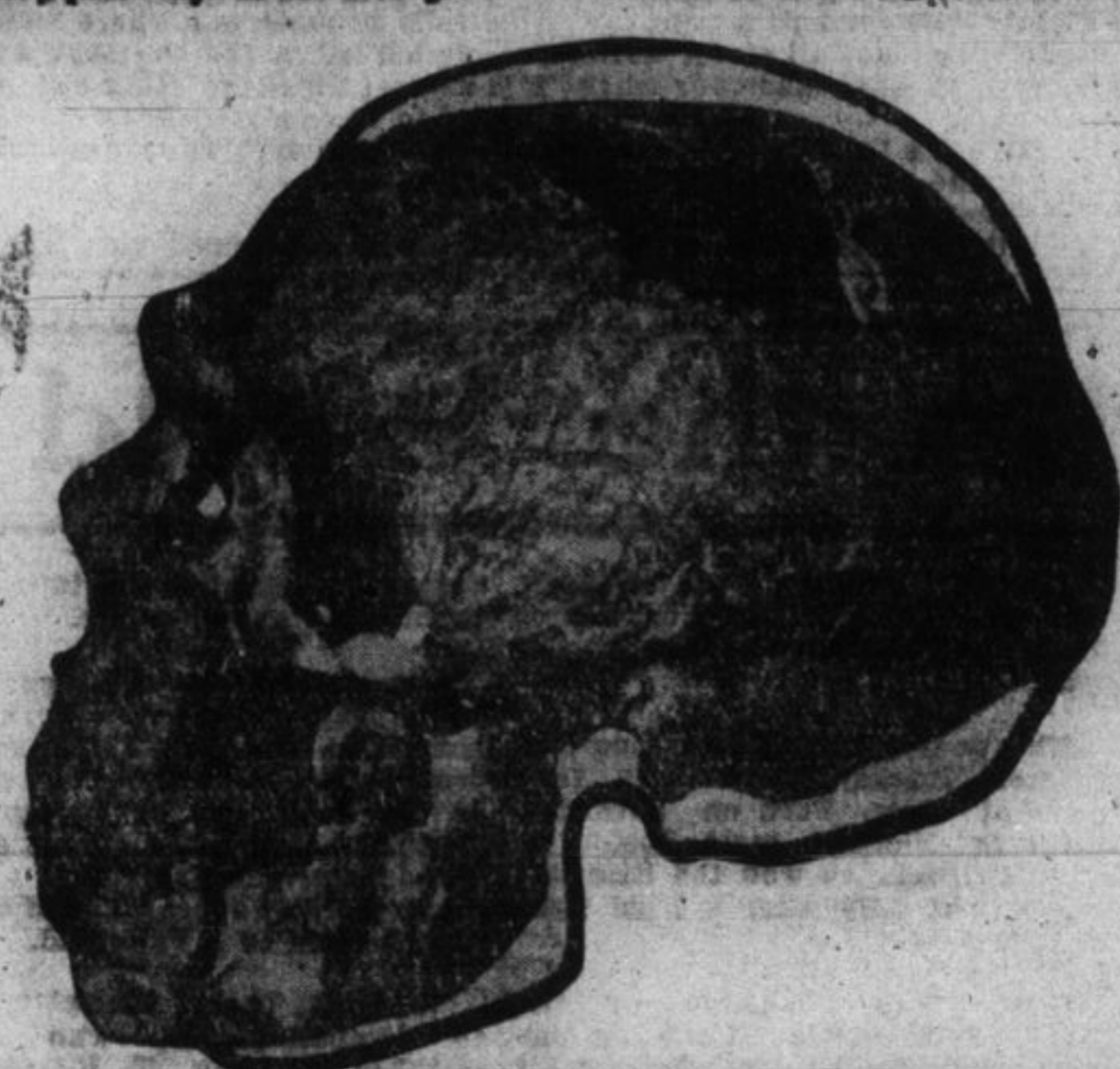
ferences between the prevailing English and German types of skull.

"In the majority of Britons—English, Welsh, Scottish and Irish," he says, "the hinder part of the head, the occiput, projects prominently backward behind the line of the neck; the British head is long in comparison with its width. In the vast majority of Germans the occiput is flattened, as if the hinder part of the head, when still young and plastic, had been pushed forward and upward. The peculiarity of the German skull is due to no artificial means: we know that the prominent occiput and flattened occiput are characters, which breed true over thousands of years, and that they are characters which indicate a profound racial divergence.

"Even in the sixteenth century, Vesalius, who is universally regarded as the father of anatomy, regarded the flat occiput as a German characteristic; but seeing that he was born in Brussels in 1514, it is possible that Teutonic anatomists may now impugn his veracity. We have, however, the evidence of Virchow—the greatest of German anthropologists. He came, rather unwillingly, to the conclusion that the vast majority of modern German people differed from British, Dutch, Dane and Scandinavian in form of head."

Professor Keith then offers an ingenious explanation why it is that although the Anglo-Saxons were originally a German tribe, there is such a complete divergence between Englishmen and Germans to-day.

"With the exodus of the Franks to France and the Anglo-Saxons to Britain in the Fifth, Sixth, seventh and eighth centuries of our era, Germany was almost devoid of the long-headed elements in her population," says the Professor. "These were concentrated in the western shore-lands, and in modern Germany it is only in these same lands, forming less than one-



Skull of Early Man, from Whom Both Briton and Prussian Are Descended—and Diagram Line Indicating General Change of Shape of Skull as Man Has Progressed in Intelligence, and Lost the Brute-Like Lower Jaw.

fifth of the total empire, that we find a good proportion of 'long' heads among the German people. When the Franks and Anglo-Saxons were moving into France and England the great area now covered by the German Empire had

been invaded from the east—from the regions now occupied by Russians, Poles and Czechs—by swarms of people with flat occiputs and short heads—men of the Hindenburg type. "History relates that by the end

of the sixth century this type had overrun all the area of modern Germany, except the lands along the western shores. We now know, however, that the permeation of Germany by men of the Hindenburg type did not begin with the break-up of the Roman Empire. In ancient graves of the early iron, bronze and neolithic ages we find the Hindenburg type, showing that the westward movement of the flat occiputs had set in thousands of years before the days of the Roman Empire.

"With the exit of the Franks and Anglo-Saxons—the short-headed ancestors of modern Germany were left as the dominant type of Germany."

When the Professor argues that the predominant English type of skull represents a more advanced race than the German many people will point to the great scientific achievements and tremendous material progress of the Germans in recent years.

To this it may be replied that some of the great scientific discoveries, inventions and ideas can be credited to Germans. Such epoch-making discoveries and ideas as those of Darwin, Stephenson, Watt, Franklin, Pasteur, Marconi and others came from the Anglo-Saxon and Latin races.

Originality and intellectual creative power are, according to this authority, the highest tests of a mentally advanced race. The modern Germans who have good physique and great industry, are

able to master the ideas and inventions of the older races and use them for their own peculiar purposes.

In the prehistoric German or Teutonic graves the skulls are nearly always long headed, of the type very commonly found among Englishmen of the upper classes, English farmers, Germans in the northwestern corner of Germany, Hollanders and Scandinavians. On the other hand, it was observed by the great anthropologist, de Quatrefages, that the modern Germans are generally broad-headed and the Bavarians the most distinctly square-headed people in Europe.

Ethnologists now believe that a certain long-headed race that we call Teutonic, one of an innumerable series of Aryan migrations from Asia, spread over what is now Germany and other parts of Europe. It must not be supposed that they wiped out the earlier peoples of the countries they invaded, but being mentally and physically superior, they imposed their language and customs of the inhabitants of the lands they conquered. Descendants of the earliest prehistoric peoples survive among the dominant races.

The original Teutonic type is traced unmistakably in ancient German skulls. In Englishmen, from the time of Alfred the Great down to the present day, and in Frenchmen of the northern part of the country, descendants of the Teutonic race—that first established the united French nation. In Germany, a large country and greatly exposed on the east to new migrations from Asia, the original Teutonic stock appears to have been swamped by invasions of Slavs, Turanians, Mongoloid and other elements. Prussia is certainly largely Slavic.

In Germany also there appears to have been a large and vigorous pre-Teutonic population, to which the peculiarly square-headed Bavarians may be traced.

Professor Keith finally makes the interesting point that races with the flat back head which characterizes modern Germans have never shown any aptitude for the sea. Portuguese, Spanish, Dutch, Norwegians, British, all the races that have been remarkable for exploits at sea, have had the projecting back-head. Perhaps the most peculiar fact he cites, in support of this, is that Germany to-day mans her navy almost exclusively with men from the northwestern shores of the empire, where the long-headed Teutonic type still prevails.

Why It's Absurd to Be So Afraid of Leprosy

ALTHOUGH the medical profession proved years ago that leprosy is one of the least contagious diseases, yet the appearance of a case of this disease in a community still causes a frantic demand that the leper be exiled. In this particular matter the public will not listen to the profession whose judgment it honors on the majority of medical subjects.

It is probable that this inborn dread of leprosy and absurd fear of contagion was instilled into Europeans in the thirteenth century, when the Crusaders, returning from the East, brought back and distributed over Europe a veritable plague of the disease. It is now believed by the medical profession, however, that the disease which afflicted Europe at this time was not leprosy in the form in which it is known to-day.

Leprosy is believed to have been introduced into Europe from Asia by the returning legions of Pompey in the first century B. C. The bacillus of the disease was not discovered until 1871, when it was first isolated by Hansen.

That the common fear of the public is ill-founded is well proven by the medical profession in the following results of their tests. The bacillus has never been surely cultivated or inoculated with pathogenic results in animals. Physicians have tried and failed to inoculate themselves with leprosy. One even went so far as to introduce suppurations from a leprosy lesion into a cut in his own arm, with negative results.

Of the hundreds of attendants in leper colonies many have worked at this calling for upwards of fifteen years without contracting the disease, in spite of their constant contact with lepers. Father Damien at Molokai is the only known exception to this statement.

There are two hundred and seventy-eight known cases of leprosy in the United States. Of these, one hundred and forty are native-born. Hansen, investigating the history of a colony of lepers who settled many years ago in our Northwestern States, failed to find a single trace of the disease among the descendants.

Only five per cent of the healthy people who

marry lepers ever contract the disease, according to proven medical statistics. In Japan only seven per cent of the children of lepers contract the disease.

From the foregoing statistics it will be readily seen that the insane fear of the public in regard to leprosy is founded purely on ancient ignorance rather than medical fact. Leprosy is far less dangerous to a community than a single case of tuberculosis, yet tuberculosis patients have never been shunned with superstitious dread.

As to the mode of transmission of the disease, absolutely nothing has been proven. Leprosy bacilli have been found in the stomachs of flies, and it is believed possible that the disease may be transmitted when flies light upon open wounds or upon the orifices of the nose.

The bacilli have also been found in head-lice and mosquitoes, but no evidence of malarial leprosy has been obtainable. The mucous membranes of the nose are believed to be the probable channel of entry of the disease and are first searched in a diagnosis.