

a patent, even under the present system, if the examiners in the Patent Office were to be more strict in their requirements as to the clear and precise definition of an invention and the distinguishing of it from the prior art. At present a patent agent can usually form a correct opinion from reading a specification as to its scope, but the ordinary manufacturer, however 'skilled in the art' he may be, must frequently find himself at a loss. It requires no fresh legislative powers for the Patent Office to require an applicant to state unequivocally what is the monopoly claimed in terms which, whilst appealing rather to a craftsman than a lawyer, would yet be precise enough to satisfy the latter.

This defect is probably due to the attitude of 'leave-it-to-the-Courts' which is a relic of the days before the Act of 1902 came into force, and would tend to disappear if it were established that the greatest possible assurance of the validity of a granted patent were to be striven for, and that only in the very last resort should patent matters come before the Court.

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Apocryphal Medical Science.

OUR attention has been directed to a book called "Microbe Hunters" recently published by Messrs. Harcourt, Bruce and Company, New York, and alleged to have been written by one Paul de Kruif—a gentleman whose name is quite unknown to us. The work evidently aims at being a kind of popular history or rather romance regarding medical discovery, and mentions us among others. We should like an opportunity to say, for the information of readers of NATURE, that the author's statements about ourselves and our researches are almost entirely apocryphal; that they are not supported by reference to the original literature; that they are largely imaginative or spurious; and that his knowledge of the subjects with which we have been concerned is obviously incomplete.

We have been legally advised that some of his assertions regarding ourselves are libellous according to British laws; but in America we have no means of protection except a public denial of the truth of his allegations, and we therefore trust that we may be allowed to publish such a denial, as emphatically as we may, in the columns of NATURE.

Dr. Cuthbert Christy's signature does not appear on this letter, as he is in Africa; before sailing, however, he left us the following statement: "With regard to Chapter IX. of Paul de Kruif's book 'Microbe Hunters' I beg to emphatically state that it contains statements which are totally erroneous, misleading and some of them libellous. As an example I will quote paragraph 2, page 264, which reads: 'The third member' (namely, myself) 'became disgusted with the ignorance and failures of his two colleagues and went off prospecting for rubber. . . .' This paragraph is absolutely untrue and libellous. It suffices to say that I have always given credit to Castellani for his discovery of the trypanosome as the etiological agent of Sleeping Sickness—see for instance my letter to the *Morning Post*, August 22, 1923. As regards my abandoning my colleagues and going off prospecting for rubber, this is entirely libellous. I never abandoned my colleagues and, as a matter of fact, I did not get interested in rubber until 1906, which was three years after the labours of the First Sleeping Sickness Commission were completed."

ALDO CASTELLANI.
GEORGE C. LOW.
DAVID NABARRO.
RONALD ROSS.

Kammerer's Alytes.

As I have been both misquoted and misrepresented by Prof. MacBride in a recent letter to NATURE (August 21, p. 264), I may be permitted to say a word in my own defence. My remarks on Kammerer's Alytes at the British Association were to the effect that the sections sent by Dr. Kammerer to America showed only asperities, not distinctive glands characteristic of the nuptial pads of other Salientia. The glands in his sections of the controls were the same size as those in his experimentals. Asperities may be formed on different parts of the body in one or both sexes of different species of frogs, and in some cases are apparently not correlated with a sex hormone. In the case of Kammerer's results, the question concerned the inheritance of spines, not of complete pads. Prof. MacBride seems to believe there has been some confusion in my mind on this subject.

In regard to the only specimen in existence of Kammerer's experimentals exhibiting merely a "clumsy attempt at 'faked' restoration," made "after its return to Vienna," we have Kammerer's own word that the blackened areas were present in the specimen when it went to England (Przibram, 1926, NATURE, August 7, p. 210), and moreover these areas are the only "nuptial pads" which show up in the photograph made in Cambridge (Kammerer, 1924, "The Inheritance of Acquired Characteristics," New York, Fig. 9) or in the one made in Vienna (Kammerer, 1919, *Arch. f. Entwicklungsmech.* 45. plates x-xi). Further, these blackened areas deceived two able biologists in Vienna who examined the specimen in my presence.

The question of Proteus is, of course, entirely irrelevant. The young Proteus possesses eyes, and the mere fact that certain individuals due to an irregularity of development, whether or not casually connected with an abnormal environment, should have continued the development of these structures, has no bearing on either the question of the inheritance of acquired characters or of Kammerer's experiments with Alytes.

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Variation of Penetrating Radiation on the Jungfrau.

OUR new researches on the penetrating radiation in the region of the Jungfrau have now reached a partial conclusion. As is well-known, the existence of this radiation was proved by balloon observations in the years 1909-1914, and, in particular, their extraordinary hardness, which pointed to a cosmic source, was then established by Kolhörster. Afterwards, Nernst in 1921 suggested that their origin lies in recently formed matter. Our researches in 1923-1924 did, in fact, give indications of a sidereal periodicity of intensity of the radiation. These variations can now be closely followed with our more sensitive instruments. It appears that the radiation reaches maximum intensity when certain celestial regions culminate, for example, the Milky Way, and specially the regions of Andromeda and of Hercules. This is explicable as a consequence of the minimum length of the path of rays from these regions through our atmosphere at culmination. The measurements were made at different stations on the Jungfrau up to heights of 14,000 feet, and on the Mönch peak at 13,500 feet above sea-level. Glacier ice was in general used as screening material.

W. KOLHÖRSTER.

G. VON SALIS.

September 14.