order, and Einstein does *not* repeat Soldner's mistake.

(6) Soldner does not mention the application of this problem for testing the theory of light which is the principal purpose of Einstein.

This comparison sufficiently shows the independence of Einstein's work even if he knew about Soldner's paper, which is not likely, as Soldner's result had fallen into oblivion following the rejection of the corpuscular theory of light on which it is based. Professor See, accusing Einstein of plagiarism, clearly has not read Soldner's original paper and has been misled by a fragmentary reprint[6] of it published in 1921 together with comments by a German physicist, P. Lenard.[7] In these comments (page 603) Lenard transforms Soldner's formula into a notation and form similar to that employed by Einstein. Professor See mistakes Lenard's transformed formula for Soldner's and bases his unfounded accusation upon its similarity to Einstein's result.

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LICK OBSERVATORY

A RECESSIVE BLACK VARIETY OF ROOF RAT

THE pelage color of most wild mammals is characterized by a rhythmical deposition of dark and light pigments in the hair, giving rise to what is termed an agouti pattern. One of the common variations occurring in agouti animals is the disappearance of the bands of yellowish pigment, which results in a totally black coloration, provided no other variations are present simultaneously. It is known that mammals may be black genetically, for one or other of the following reasons: (1) Because they possess a dominant or incompletely dominant extension factor, which extends the dark pigments into the regions ordinarily occupied by the lighter ones only, as in "steel gray" rabbits;[1] (2) because they possess a recessive non-agouti factor which precludes the formation of light pigments in the hair with the dark ones. Most black varieties of domesticated animals belong to the latter class.

The natural color of the black rat, *Mus rattus,* is a uniform black, which has been found to be dominant over the agouti of the closely allied roof rat, *Mus alexandrinus.*[2] This case obviously falls into the first of the above-named categories. Black individuals obtained from a stock received from Mr. H. C. Brooke of Taunton, England, were at first supposed to be specimens of the dominant black derived from *M. rattus.* These blacks were produced in matings between grays and yellows, and it was assumed at first that black would be found to be dominant over gray as in Morgan's experiments. The incorrectness of this assumption was apparent when gray mated to gray produced litters containing black animals; six black rats produced in this way have been recorded. Matings of such black males to wild gray *M. alexandrinus* females have resulted in the production of seventeen offspring, all of which are gray.

This evidence indicates very clearly that we have in this black variety a color factor which is different from the one characterizing the black rat, *Mus rattus;* one which is recessive to gray or agouti, and which is probably the homologue of the factor producing the black variety in the Norway rat, the house mouse, the guinea-pig and the rabbit.

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QUOTATIONS

A "ROSS INSTITUTE"

THE approaching twenty-fifth anniversary of Sir Ronald Ross's epoch-making discovery that malaria is transmitted to man by the mosquito has led a number of influential persons, including leaders of the profession in this country, Mr. H. H. Asquith (ex-prime minister), Dr. Roux, director of the Pasteur Institute, Paris; Dr. R. M. Strong, of Harvard University; Dr. William H. Welch, of Johns Hopkins, and Sir Charles Sherrington, president of the Royal Society, to make an appeal to the public. They point out that the discovery has revolutionized medical science and living conditions throughout the tropics and, among other great things, enabled the Panama Canal to be constructed. It is impossible to exaggerate the services Ross has rendered. He must be ranked among the great investigators whose labors, like those of Pasteur, Lister, Jenner and Golgi, have conferred inestimable and lasting benefits on mankind. All the world has shared in these benefits, but Great Britain, which has vaster tropical areas than have ever been ruled by a single power, has profited most abundantly, and she owes a very special debt of gratitude to the son who has rendered this service. There is in

[6] "Annalen der Physik," 65, 593, 1921.

[7] Lenard, it should be said, recognizes the error in Soldner's work to which attention is called in this paper and gives correctly the value for the deflection to which Soldner's theory leads. It may further be stated that Soldner's result for the light deflection by the Earth $\omega = 0''.001$ is also in error and should be $\omega = 0''.00014$ (in addition to the erroneous factor 2 in the formula a mistake was made in calculating the value of the acceleration for the peculiar units used).

[1] Punnett, R. C., 1912, *Jour. Genet.,* 2, 1915; *ibid.,* 5.

[2] Morgan, T. H., 1909, *Am. Nat.,* 43.