

“That the sciatic nerve in the congenitally toeless animal has inherited the power of passing through all the different morbid states which have occurred in one of its parents from the time of the division till after its reunion with the peripheric end. It is not therefore simply the power of performing an action which is inherited, but the power of performing a whole series of actions, in a certain order.”

In most of the cases of inheritance recorded by Brown-Séguard only one of the two parents had been operated upon and was affected. He concludes by expressing his belief that “what is transmitted is the morbid state of the nervous system,” due to the operation performed on the parents.

With the lower animals Dr. Proper Lucas has collected a long list of inherited injuries. A few instances will suffice. A cow lost a horn from an accident with consequent suppuration, and she produced three calves which were hornless on the same side of the head. With the horse, there seems hardly a doubt that exostoses on the legs, caused by too much travelling on hard roads, are inherited. Blumenbach records the case of a man who had his little finger on the right hand almost cut off, and which in consequence grew crooked, and his sons had the same finger on the same hand similarly crooked. A soldier, fifteen years before his marriage, lost his left eye from purulent ophthalmia, and his two sons were microphthalmic on the same side.⁵⁹ In all cases in which a parent has had an organ injured on one side and two or more of the offspring are born with the same organ affected on the same side, the chances against mere coincidence are almost infinitely great. Even when only a single child is born having exactly the same part of the body affected as that of his injured parent, the chances against coincidence are great; and Professor Rolleston has given me two such cases which have fallen under his own observation,—namely of two men, one of whom had his knee and the other his cheek severely cut, and both had children

⁵⁹ This last case is quoted by Mr. Sedgwick in ‘British and Foreign Medico-Chirurg. Review,’ April, 1861, p. 484. For Blumenbach, see above-cited paper. See, also, Dr. P. Lucas, ‘Traité de l’Héréd. Nat.,’ tom. ii. p. 492. Also, ‘Transact. Linn. Soc.,’ vol.

ix. p. 323. Some curious cases are given by Mr. Baker in the ‘Veterinary,’ vol. xiii. p. 723. Another curious case is given in the ‘Annales des Scienc. Nat.,’ 1st series, tom. xi. p. 324.