

October 5th., 1916.

THE COURT,  
GRAYSHOTT,  
HASLEMERE.

My dear Leonard Darwin,

I can't help in solving your question. The answer must greatly depend on where the people live and how. In many villages, notably Scotch sea-shore ones, the Fisher folk never marry outside their immediate neighbourhood. In such an extreme case the number of their forefathers, any number of generations back, would hardly exceed that of the present villagers. On the other hand, a migratory population might have greatly intermarried with outsiders.

Problem. Noah and his wife have an increasing number of descendants during  $n$  generations, find the  $r^{\text{th}}$  generation in which the number of ancestors is largest. - (Approach the problem in its utmost simplicity, of every 100 persons becoming  $100+a$  in the next generation), the figure is something of this sort

I worked it out once, but forget the result, except that  $r$  was not  $= \frac{n}{2}$ .

We are settled in the Hindhead district for the winter, not in this house till after Nov. 15, and then in another close by. I pull on, - sometimes rather badly, often rather well, but very infirm always, and am wheeled about and carried up and down stairs. But I have nothing to complain of. I sleep like Morpheus and enjoy a chastened dietary, and have had my day.

I hear from time to time, personal and scientific news from Sir A. Geikie, who lives within a distant reach but there are many nice people about. My niece takes excellent care of me. That village is not far off, where the following occurred (told me by the vicar's son).

Vicar. "Why Mary, is the old woman dead at last? She seemed to me fairly well yesterday."

Mary. "Yes sir. Her cough has been bad and noisy at nights for long, and Jim said to me last night 'I can't abide that cough. Get up, Mary, and put the pillow on your mother'. So I got up and put the pillow on her, and she was that weak, her spirit fled away like a bird."

Bhang - (Hashisch) in cigarettes is I find a great solace in fits of bad asthma and cough.

How good the photos are in the R, Geog. Journal. You will be hard at work soon with those stirring people. Remember me please most kindly to your wife and two brothers now with you.

Ever sincerely yours,

(Sgd.) Francis Galton.