The Canadian Thresherman and Farmer JAN. '12 CHARTE

real difficulty. "If three snakes, forming a circle, begin to swal-low each other by the tail, it is apparent that the circle apparent that is the circle gradually diminishes in dia-meter. When does this process cease, and what becomes of the snakes?" Let the reader see what he can make out of this.

One is inclined to say of this something analogous to the "solvitur ambulando" — "It is solved by walking" — with which some angry man cut the Gordian knot tied by Zeno, the famous old Greek philosopher, who undertook to prove that there was no such a thing as motion. "Every body must body must there," argueither be here or there, ed this ingenious splitter of hairs. "It is impossible that it hairs. can ever be in two places at one and the same time, therefore it is impossible that it can ever be in motion." The argu-ment seemed and seems unanswerable, and a savage "solvitur ambulando" is perhaps as good a solution as could be found.

It is much the same with that other Greek puzzle concerning swift-running Achilles and the tortoise. While the tortoise latortoise. boriously boriously covers ten yards, Achilles leaves a hundred yards behind him. In a race between the two, the tortoise is given a hundred yards start, and the contention of the subtle schoolmen was that Achilles, in such conditions, could never overtake his slow-footed competitor. "For," said they, "when Achil-les has completed his hundred yards he has the tortoise still ten yards ahead of him. By the he has covered this ten time yards the tortoise has advanced one yard. Achilles now covers the yard separating him from the tortcise, but still finds the latter one-tenth of a yard front. When Achilles has run in this tenth of a yard, the tortoise has drawn away ahead an extra hundredth part of a yard. And so such a course of reasoning might be continued ad infinitum, demonstrating as plainly as possible that, in spite of his superior speed, Achilles will always be outdistanced by the tortoise. Clearly there is a flaw somewhere, and in practice, the whole argument would be overthrown in few moments. It would, in fact, be "solved by running."

Something of the same kind long would it take a man to pay off a debt of ten dollars under an arrangement such as this. He promises to pay five dollars the first month, two and a half dollars the second h, one a quarter the month, and so on, payment being half that month, third each of the proceeding one?" As a matter of fact, the debt would never be repaid. At the end of six months he would have paid off all but 10 cents, but if he were to continue until the crack of doom there would be always a balance against him-not a large balance, it is true, but still a balance. It is assumed, of course, for the purpose of argument, that the debtor has some practical means of pay-ing off minute fractions of a cent, and that his creditor, when the balance has almost reached vanishing point, does not take a leaf out of the book of the big drapers and suggest that a few pins would be ac-cepted in lieu of the little difference outstanding.

Donkeys, says a Frenchman who has made a study of them, are very clever animals, and often surpass the dog. Yet, if we are to believe logical theorists a donkey placed exactly midtwo between hayricks way would starve to death, since there is no reason known to these gentlemen why he should select one hayrick rather than the other. Personally we should be inclined to believe that the donkey would very soon find a way out of the difficulty, and would not remain in a position of such unstable equilibrium a moment longer than the time strictly necessary to reconnoitre the position.

There is another class of propositions which leads to very curious results. and explains away in a perfectly simple and natural manner many of those so-called extraordinary coincidences which set vagaries souls marvelling at the vagaries of chance. "How would you instance, "that there are at least two per-sons in the world who have same number of precisely the hairs on their head?" culate, if you are able, the largest number of hairs any one individual can possibly have on his head. If you have no data to go upon, put your estimate as high as you reasonably dare. A million is a large number, but, to make assurance, doubly sure, say, if you like that there are heads on which as many as a hundred million hairs are to be counted.

You will still be far short of total population of the 1. Once admit this, and the world. Once admit the case is proved. If the num ber of individuals living ex-ceeds but by two your largest estimate of the number of hairs individual's head, then on any must there be at least two in-dividuals with exactly the same number of hairs. Even supposing that one individual has a id as innocent of hair as a billiard-ball, and that a hun-dred million possess from one to a hundred million hairs apiece, the head of the second man over your hundred million must have its exact counterpart somewhere among the rest. the continually In the way

repeated assertions of naturalists that Nature never makes any two objects-whether they be the leaves of trees or men's faces-precisely similar may be disproved, provided you can show that the differences becan tween leaves or faces are less than the total number of leaves



WRITE today for our Free Booklet. It tells how the Hamilton Kitchen Cabinet forever does away with Kitchen drudgery, improves the appearance of the Kitchen and saves its own cost many, many times. The Hamilton combines all the latest and most scientific Kitchen Cabinet features.

We will ship you a Hamilton Kitchen Cabinet subject to your approval. If you are not pleased with it, return it to us at our



Patronize Those Who Patronize This Magazine