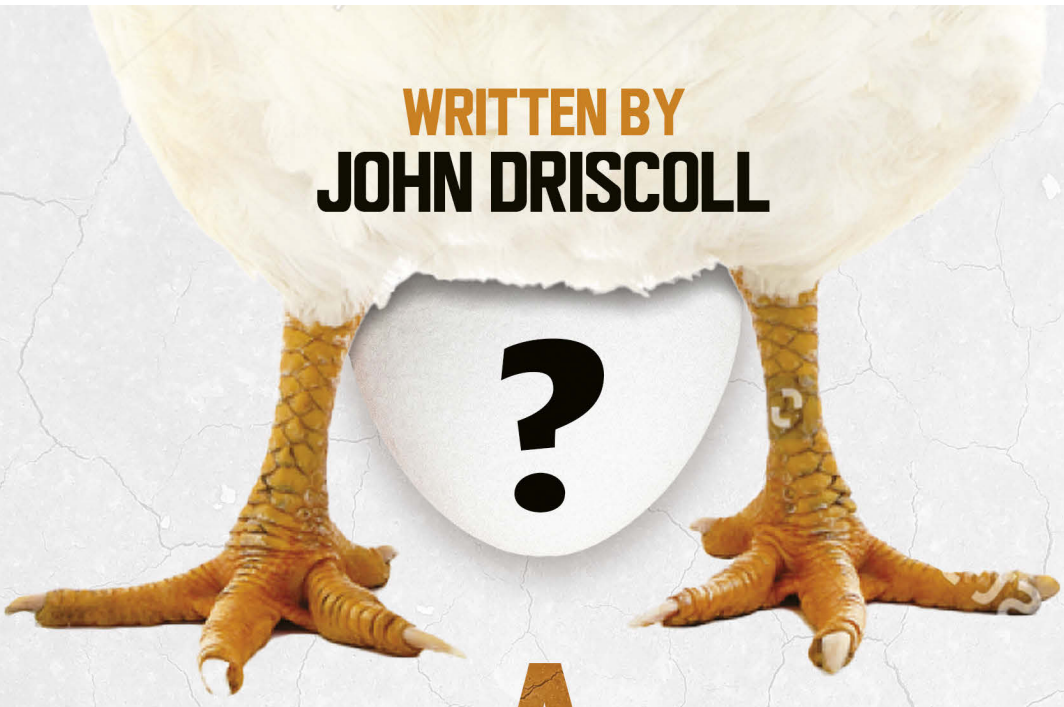
WRITTEN BY

JOHN DRISCOLL



A HEN AND A HALF

INTRIGUING CONUNDRUMS, CONFUSING PARADOXES, BAFFLING CONJECTURES AND CHALLENGING PUZZLES

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Intriguing Conundrums, Confusing Paradoxes, Baffling Conjectures and Challenging Puzzles

John Driscoll

Tarquin

Publisher's Note

Tarquin is delighted to present this unique collection of logic and mathematical puzzles from John Driscoll. You'll find the answers and much more in the Appendices at the back of this book, with some explanation.

There are also extended answers and sometimes new puzzles too, in the Ahaah ebook. This ebook is free of charge with purchases of the book and direct purchasers will be issued with it automatically. If you bought this book through a third party, you can get the ebook by completing the brief webform at www.tarquingroup.com/halfahen which asks you a few brief questions about how you bought the book and the code number you will find at the base of this page.

Have a look at **www.halfahen.com** too for ideas and tips for how to solve these puzzles and some free ones too!

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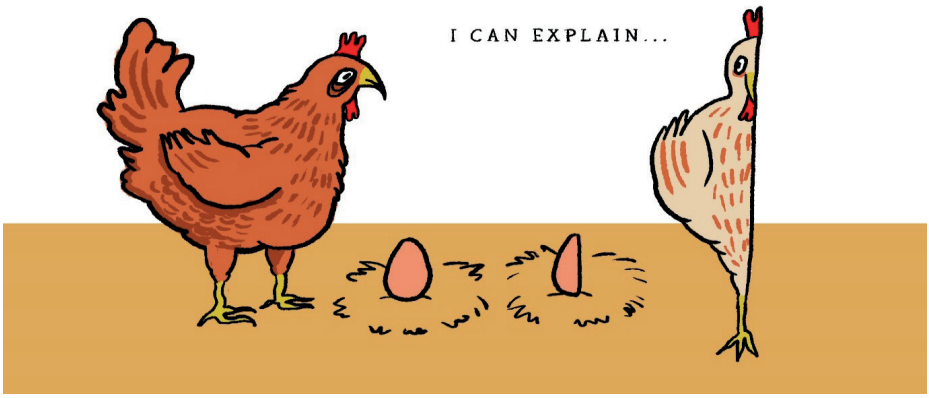
Preface

Over the years, I have been asking various individuals and groups of people, for the answer to the following riddle;

“If a Hen and a half, lay an Egg and a half in a Day and a half, how many eggs would 3 hens lay in a week?”

This should be a relatively easy puzzle to solve quite quickly in one’s head, but, maybe surprisingly, when put on the spot, few people get the answer right first time. Before I carry on, give yourself 30 seconds or so (but not longer) to work this out in your head, no writing anything down or using your calculator, just find the first, best answer you come up with, before reading any further.



The most common initial incorrect answer is 21. That said, some "contestants" came back at a later time, even the next day or week with the correct answer (that I will reveal and explain later) which led me to wonder why they couldn't get the answer right first time. To be fair here, I often posed this riddle in pubs or at conferences and the like, during breaks at the bar and at other social functions, where peer pressure and social duty may have had a detrimental effect on clear thinking!

However, the fact that those who initially got it wrong were often determined to get it right and more importantly, needed to understand why the right answer was right! This made me wonder what was driving this curiosity and maybe there was a need to explore and explain more diverse situations, that could be clarified by logic or simple mathematics. Now, those of you that hate (or think you hate) mathematics don't panic. There will be no complicated equations, differentiation, calculus, or any convoluted formulas to dampen any ongoing interest. Just simple logical explanations. However, that said, if you are one of the more inquisitive minds who revel in a more robust, scientific or basic mathematical solution, then these are occasionally added in the Appendices, with even more explanatory material in an ebook section for each Chapter for those who want more insight pertinent to the relative subject, but there is no need to go there if you are happy with the Chapters on their own.

Anyway, I digress.

Often, once I gained the interest of my audience, my repertoire continued with other puzzles, lateral thinking problems, conundrums, magic, and interesting arithmetical tricks sometimes progressing to and using extremely basic mathematical and scientific principles. Favourites were

and still are situations and solutions to problems, that at first glance appear to be incorrect, paradoxical, or even impossible.

What became clear to me, is that often, those with a love for problems and puzzles, do not always readily understand the solutions. However, what was vibrant, is that almost all of my captive audiences, who were often confounded by a problem, were generally always delighted to have the answer given and explained in a straightforward and logical manner, occasionally including a simple mathematical solution, even though sometimes, some of these explanations didn't appear to be what we readily understand to be mathematics!

Many of my compatriots and spectators suggested I put all of this reserve of information contained in my head, down in a book, which I have been threatening to do for more than 20 years and here it is, giving my best collection of hard to believe situations, confusing paradoxes, party tricks, conjectures, puzzles and brain teasers to keep the most discerning readers engaged and hopefully fascinated by some of the curious conundrums and interesting solutions found herein. For absolute clarity, I should emphasise, that many of the situations, circumstances and conundrums contained herein are not all of my own creation, but are sometimes long-standing curiosities, that have been gleaned over time by conversation, hearsay and debate.

This book has been designed to be fun, intriguing and educational and I believe it would be beneficial for every educational institute to have copies in their libraries and every home to have one on the family bookshelf.

Finally, if you need more understanding to any of the problems and situations raised, as book owners you have a couple of alternative

options to get further information. For some problems you can visit the Halfahen website – www.halfahen.com – which provides some insights into how to solve some puzzle types and links to some puzzles in the book as well as some other puzzles too.

For some of the more complex and intriguing subjects your individual concerns or doubts will be resolved best by using the **Ahaah** ebook that is free to buyers of this book - see page ii for details.

The acronym for *A Hen and a Half* – **Ahaah** resembles and exaggerates the equivalent Eureka exclamation – **Aha!** – and intends to replicate the moment as the reader realises the missing and often, the sometimes obvious!

Most importantly, I hope you enjoy.