

know nothing of. I think it is very likely that if you were to ask any eminent living astronomer for information about the Star of Bethlehem, he would refer you to the second chapter of Matthew, and tell you it contained all he knew about the matter.

But there have been some astronomers—and eminent ones too—who have done some supposing and some figuring about it, among them Kepler, at the beginning of the seventeenth century, and Ideler and Encke in the first half of the present one. Their supposition was that the phenomenon which drew the Magi to Judæa might have been a conjunction of two of the larger planets, a conjunction so close perhaps that the two may have looked like one star. They figured their way backward through the centuries and found (I give Encke's results, the latest and most accurate) that Jupiter and Saturn were in conjunction in the year 7 B.C., that at the time of conjunction they were about a degree apart, and that three such conjunctions happened in that year,—on May 29, on September 30, and on December 5.

Is a distance of a degree small enough to make two bright stars look like one? Proctor thought it was—if the observers were “miraculously short-sighted.” You can settle this matter for yourselves. The stars in Orion's Belt are about a degree and a half apart. On March 28, and again on May 30, this year, Saturn and Regulus will be about a degree and a third apart. You can easily imagine the former distance reduced by a third and the latter by a fourth. Do so, and then try to imagine a pair of eyes—not “miraculously short-sighted”—that could make the two objects look like one. [On the 13th of November next at 7 p.m., sixty degree time, Jupiter and Mars will be exactly a degree apart.]

This is one difficulty connected with the Jupiter-Saturn theory of the Star of Bethlehem. Another is as to the chronology. These conjunctions happened in 7 B.C. Was that the date of the events in Matt. ii. 1-10? And a third difficulty is to explain how these planets could be got to behave as the star behaved according to verse 9, and the natural inference from verse 10.

Now let us look back to the “temporary” star theory. In itself it is quite as reasonable at least as any of the other theories, but it is to it we owe all the nonsense that was talked and written about the Star of Bethlehem three years ago, which mess of nonsense we seem to be again threatened with this year.

A temporary star is an extraordinary star which appears for a time only. Eleven such are recorded in history—six between 150 B.C. and 1700 A.D., the other five within the last forty-two years. The most famous of the lot was the one of 1572, observed by Tycho Brahe. Any astronomy book will tell you about it—how bright it was when first seen, how for

a time it grew still brighter and was visible in daylight, how within a week or two it began to fade but continued visible to the naked eye for sixteen or seventeen months, after which time it was seen no more. It appeared in Cassiopeia and was a fixed star while it lasted. This was an extraordinary star; the Star of Bethlehem was an extraordinary star; therefore, so said the fool in his heart, the two stars were —, but we have not yet got all the facts. In 1264 and 945 brilliant stars appeared in the region between Cassiopeia and Cephus. We don't know that these appeared in the same spot as Tycho's star, but neither do we know that they did not. “We may suspect,” says Herschel, all three “to be one and the same star with a period of 312 or perhaps 156 years.”

There are known facts as to brilliant temporary stars in or near Cassiopeia, and that is what Sir John Herschel deduces from the facts—a “may suspect” and a “perhaps.” But the Star of Bethlehem crank gets much more than that out of them. “May's” and “perhaps's” he cannot away with. Herschel may suspect that the stars of 945, 1264 and 1572 were one and the same star; this chap is sure of it and knows also that these three were one and the same star with the Star of Bethlehem. He may have heard that Beza, who was living in 1572 and saw Tycho's star, thought it was the Star of Bethlehem, just as some earlier theologians thought the Star of Bethlehem was an angel.

Now, given a fellow fool enough to believe that the identity of all four stars was established by the evidence adduced above, it is easy to see how he might have proceeded to evolve his prediction of its re-appearance in 1887 or 1890. Put the nativity three years before the Christian era, (when or about when it is now generally held to have happened), and the interval between the appearance of the star to the Magi and its appearance to Tycho is 1575 years. But it appeared in the 13th and in the 10th centuries as well as in the 16th and the 0th, therefore, it must also have appeared in the 7th and the 4th centuries. This makes six appearances in 1575 years, giving an interval of 315 years between each two. (The actual intervals between the recorded appearance of the real stars of 945, 1264 and 1572 are not 315 years; but when you put your hand to the plough of folly you must not look back for trifles like this). 1572 plus 315 gives 1887; therefore, the seventh appearance should have happened in that year. But it didn't; it was Venus that all those good people stood staring at with open mouths in those December mornings. Well, let us do some more tinkering at the facts. We'll keep the 315 years because it will save us the trouble of doing another division sum, and simply shift the date of the nativity three years forward to the beginning of the Christian era, where Denis the Little fixed it and where, of course, it ought to be. This, of course, shifts the date of each appearance of the star three years forward, and changes the 1572 with which we began operations into 1575. But that is only another trifle, and just see what we have gained by it. It makes the seventh appearance fall in 1890.

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