

## Connecticut Yankee in King Arthur's Court

I am an American, born and reared in Hartford, Connecticut. We lived right over the river out in the country. Therefore, I am a Yankee of the Yankees. I am practical, dogmatic, and straightforward in my habits and with my words. My father was a blacksmith, my uncle was a veterinarian, and I learned both occupations when I was young. Then I went over to the great ammunitions factory and learned my real vocation. I became completely knowledgeable about my new profession. I learned to make everything: guns, revolvers, cannons, boilers, engines, all sorts of laborsaving machinery. Why, I could make anything anybody wanted; anything in the world, it didn't make any difference what. If there wasn't any quick modern way to make a thing, I could invent a way to do it with expertise and proficiency. I became head superintendent and had a couple thousand men under my supervision.

Well, it is understood, a man like that is a man that is full of fight and might even be referred to as a pugilist. With a couple thousand rough men under my supervision, I had a myriad of opportunities to engage in brawls, until, at last, I met my match and got my just desserts. It was during a misunderstanding conducted with crowbars with a fellow we used to call Hercules. He knocked me out with a crusher alongside the head that made everything crack. My brain seemed to rattle and shake against my skull and I was stunned. Then the world went out in total darkness, and I no longer felt anything. I must have been unconscious for a while.

When I came to again, I was sitting under an oak tree, on the grass, with a beautiful and expansive country landscape all to myself, or so I thought. Suddenly there appeared a fellow on a horse, looking down at me. He looked as though he had just stepped out of a storybook. He wore brilliantly glistening iron armor from head to toe. The helmet on his head was the shape of a nail-keg with slits in it. He had a shield, a sword, and a colossal spear.

## Looking to the Stars

Throughout history, even before the invention of the telescope, we have watched the heavens. We have created constellations of stars that say more about us than about the stars themselves: the Dragon, the Hunter, the Southern Cross, the Great Bear. We may use the stars to steer by, but we also use them as symbols. For example, our most popular actors and musicians are called “stars,” while students receive gold stars for excellent work.

In recent years, our knowledge of stars has begun to catch up to our fascination with them—and that knowledge has proven just as intriguing. A star’s formation, its lifecycle, even its eventual death, all involve energy on a vast scale.

### The Birth of a Star

The birth of a star is a complicated process, but Dr. Jean Turner, a professor of astronomy at UCLA in California, has found a simple way to discuss an event of vast proportions: “Gravity tends to cause gas clouds to shrink into spherical balls, and that’s basically what a star is. If you let a gas cloud collapse, it will form a ball. If that ball is massive enough, it will get hot enough inside to fuse hydrogen, creating a star.”

The key components are heat and compression, the compression occurring because of gravity. Both the heat and the compression are almost inconceivable because they occur on such a cosmic scale. Even if the entire surface of the Earth suddenly imploded in a torrent of flames, it would not come close to the catastrophic forces on display during the birth of a star.

Specifically, when the temperature reaches 15 to 20 million degrees Fahrenheit, the gases and dust produce hydrogen plasma. This plasma will form the core of the new star. The shrinkage of the gas causes the pressure and temperature to increase, and causes the plasma to rotate at an increasing rate of speed.