

The Bee's Home Magazine Page

Center of the Universe

By GARRETT P. SERVISS.

It is possible that the center of the universe has at last been found.

It is a great star that has been selected as the probable heart, or heart, of the sidereal system, which contains at least a hundred million other stars. The chosen star is Canopus, in the southern hemisphere of the heavens, only visible from the extreme southern portions of the United States. Although very brilliant and exceedingly beautiful, Canopus is not as bright as Sirius, the glorious "Dog Star," which flashes with diamond radiance in our winter heavens. But it is only the deceptive effect of relative nearness that gives Sirius its apparent superiority over Canopus.



Sirius is about nine light-years distant, a light-year being the distance that light, traveling 186,000 miles per second, would go in twelve months, and if we were as near to it as we are to the sun it would give us thirty or forty times more light and heat than the sun does; in other words, it is a sun thirty or forty times greater than ours.

Canopus is at least 500 light-years distant, and if he were as near to it as to the sun it would pour upon us probably 5,000 times as much light and heat as we now get from the sun.

This means, of course, that the earth could not exist at all in such proximity to Canopus. It would simply be puffed away in a whiff of burning gases. At a distance of a little more than 90,000,000 miles from the sun the earth finds a temperature and an illumination which are both quite agreeable, as tested by our senses. That distance would have to be increased to about fourteen thousand million miles from Canopus in order that similarly temperate conditions should prevail for us under the dominion of that tremendous sun!

It is not simply because of the enormous calculated magnitude of Canopus that it has recently been selected as the probable center of the whole universe, but more particularly because the observed motions of the stars seem to indicate that they circulate about that point which is occupied by Canopus.

Even our far-distant and insignificant sun appears to acknowledge by a slight inclination of its path through space the dominance of the great master sun.

But if Canopus really is the center of the sidereal universe it does not govern it with the absolute power that the sun exercises over its planets. It owes its pre-eminence rather to its position than to its energy. The universal system of the stars is, in a sense, federative and self-governing. That system has a center, because of the mutual attractions of the millions of bodies composing it. All are masters and all servants, in their degree. They are like the revolving electrons in an atom. It is the universal law of orbital revolution, affecting them all, which keeps them in motion about a common center, and not simply an over-mastering force emanating from that center.

Yet, Canopus must make its power felt upon the stars circulating around it, however deliberate their movements, and however great their distances from the center. If we suppose that the brilliance of Canopus, area for area, is the same as the sun's, then its diameter must be about 100 times that of the sun, its surface 5,000 times, and its mass, which measures its attractive power, 4,000,000 times!

But this assumes that its mean density is the same as the sun's. In fact, there is reason to believe that the density is far less than that of the sun. Still, if we should arbitrarily diminish it 1,000 times the attractive force of Canopus would remain 4,000 times greater than the sun's.

Canopus is not the first star that has been chosen as the probable or calculated center of the universe. In the middle of the nineteenth century a similar honor was paid to the star Alcyone, the brightest member of the Pleiades group, because the motions of the stars in various parts of the sky, as far as they had been studied at that time, seemed to indicate a common center in the midst of the Pleiades. But it was long ago discovered that the observations on which the primacy had been assigned to Alcyone were erroneous and it is quite possible that the present choice of Canopus will prove to have been equally illusory.

"Balm for the Wall-Flower!"

By Nell Brinkley

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Do you know, I am very lucky? I'll tell you why. Because men let me into the things they really think—once in a while. Because, you see, I'm in a sentimental business. Danny and I have an office, and we deal in that "stuff" we send out in a reflection as faithful as we can make it of what comes in. And a lot comes in! You small girl, who are living instead of reflecting what other people live—you lean your little ears to listen close, but you seldom hear what men really think. Sometimes it is very good that you don't, and sometimes it is very bad that you don't. And this that I—being very lucky—heard will soothe the sore heart of a wallflower! A wallflower who can't understand why she should be, and drops tears thinking about it after a dance, where she spent most of her precious minutes leaning her shoulders against the wall! A man sat beside a bright, open fire in the office of Danny and me and told us this:

"Do you know, I have a theory about wallflowers?"

"Oh, gee!" Danny busted out; "tell it very quickly, because that subject worries me sick up to death!"

"I have a theory about wallflowers," quoth the man, "and it was finished the other day when I met a girl I hadn't seen for six years. And when I knew her those moons ago she was a wallflower. She was very shy and quiet and plain; and, though her dear mother made for her darling little frocks and fixed her hair as pretty as possible, and loved her much, and taught her gentle manners, she stood against the wall at a dance! And the pink slippers that her dad slaved to give, and the dainty little dress that

her mother sat up nights to put thousands of little stitches into went for nothing at all and that fan that she kissed before she started never unfolded at all! And the few dances she had were nightmares for the partner who took her seemed to fly away in relief when the dance was over. But she never batted an eyelash, though her heart was so tender that every footfall that trod over it

left a mark. I didn't look much at her myself. I remember that. But goodness, she must have been busy all the time. She had a soul and brain. And they made their mark. I've always believed that a soul and a brain did mold and shape and make pure beauty and charm in some fashion, but I never had it proved till now. The other day I met the wallflower. (And I'm crazy to meet her again.) She's lovely. She's clever and pretty and gay and bright. She's a magnet! The soul and brain have been working. And wallflowers won't believe this! Her very hair and eyes and skin are beautiful.

And the same day, Dan, I met a girl, who danced every dance in that time six years ago. She was a flower right out in the sun—she was! I wondered—and the wallflower must bitterly have wondered—

why it was that she, who neither loved beauty or saw it, who had very little brain and no brain worth nicking your finger at, should be so rich in the very thing that the wallflower longed for and only held deep in her heart. It looked as if what was deep in the soil made no difference in the flower that came to the surface. But it does—by George! I got a shock. The girl I had circled around then with all the other moths was just a plain girl! Her beauty was gone in some mysterious fashion that you couldn't fasten onto. She was right where we'd left her in brain, and the beauty with nothing to feed on—was withered. And her old-time chatter bored me to death. The shine in her eyes was gone—the lurking curves—the quirk of an eyelid—the color under her cheek.

And my theory is proved. Men know that in their hearts. Brain and soul work silently—they are rich soil. And they are bound to tili and shape the flower that grows out of them. To the girl with these things years are magic. Each time you see her she is lovelier. And she acquires the very things that once she longed for and so lacked. If wallflowers with those things beneath the surface only knew that—they'd wait and be busy and happy. For it's enough to burst the heart with joy, I should think, to know that beauty and power would grow with the years—instead of bursting into the glory and fading soon. For that little wallflower I knew is lovelier now than ever the other flower was. One has finished blooming and the other has only begun. Here's balm for wallflowers. Dan and I are telling you about it.—Nell Brinkley

Advice to Lovelorn : By Beatrice Fairfax

Be Sensible.
Dear Miss Fairfax: I am a girl of 18 and am deeply in love with a policeman fourteen years my senior. I speak to him frequently, but I do not think he knows of my love for him. What shall I do? **PERPLEXED.**

Of course he does not know of your love for him, unless you have been very silly and forward. For all you know this man may be married. Don't idealize men of whom you know nothing. And don't for a minute imagine that at 18 you are capable of a lasting love. What you feel is a silly infatuation. Try to conquer it.

The Consulate Marriage.
Dear Miss Fairfax: I am a girl of foreign birth and going to be married at the consulate of my nation. Kindly inform me what is a correct attire, and if I shall remove my hat or coat if wearing this, under the ceremony. My husband-to-be will be wearing his business suit, and no witnesses will be present.

Why not talk the matter over with your brother? He may not realize how much this means to you. If he cares too, you must each tell her of your feelings, and when she has chosen, feel that the best man has won and that the other has no grievance.

Do You Know That

It takes twelve seconds for the projectile of a twelve-inch naval gun to reach its point of impact when firing at a range of five miles. Shells for twelve-inch guns cost \$50 apiece.

Last year Germany launched six steamers of over 10,000 tons, the largest being about 66,000 tons gross.

For every million tons of coal mined four or five are killed and from 500 to 600 injured.

Fishermen in Ireland who use a salmon rod and line must pay a license duty of \$2.

Floating mines have flared in naval warfare for nearly 50 years.

From deep water to deep water the Panama canal is fifty miles in length.

Thirty years ago a drought in Australia destroyed 10,000,000 sheep.

The Kaiser's visiting cards, measuring six inches by four, are the largest known.

Butterflies and Girls Who Count

By BEATRICE FAIRFAX.

"I am a westerner, but have lived in New York for some time and through conversation with young married men of this city I have formed the opinion that the main object in life of New York girls is to have what they call a good time, no matter what the cost to their moral or financial standing.

"It is a common sight to see young married women going off in the evening with friends of 'hubby'—who is working overtime that he may have more money to spend on a wife who he thinks loves him. And there are other young men—and their number is legion—who would be only too glad and willing to get married and have the means to do so—but they are afraid to take a chance after they see other failures," writes Frank M. And I am sorry to confess that there is some truth in what he says. But he states only one side of a many faceted case.

There are many women and girls who live only to enjoy, and enjoy only the fevered pleasures of expensive artificial excitement. There are girls who have a vampire attitude of taking all of devotion, of consideration, and of sacrifice as fitting tribute for which they have paid and paid well if they favor the victim with a smile. But to every such woman there are half a dozen, at the very smallest estimate, who are splendid, normal women with the fine instincts of home-making, motherhood and self-sacrifice pulsing in all their being.

Unfortunately this quiet average woman is passed over by the pleasure loving, beauty admiring youth of our modern days in his dazzling admiration or denigration of the more brilliant, if-of-the-field woman who tolls not—nor spins. The gorgeous array and witching wiles of the woman of whom he disapproves blinds the average man's eyes to the presence of her quieter sisters, who are like shadows of evening and merge into the atmosphere, while the more brilliant and dazzling—if unscrupulous—woman is in the blinding glare of the "white lights."

Unfortunately the brilliant plumage that a bird wears when he would a wooing go is paralleled in the human race by the gold that a wooer offers his lady love in order that she may dazzle all eyes after marriage, even as she has won a wooer by the brilliant plumage that contrasts so strangely with my ladybird's quiet, demure coloring.

The girl of today is making a sad blunder when she docks herself in gay clothes and works out her destiny in dancing and singing and rushing about to one place of amusement after another with any available cavalier, be he some one else's husband or be she some one else's wife.

But the man of today is making a sadder blunder when he supposes that these silly little butterflies with dragged wings or vampires with beating pennons compose the sum total of the feminine world.

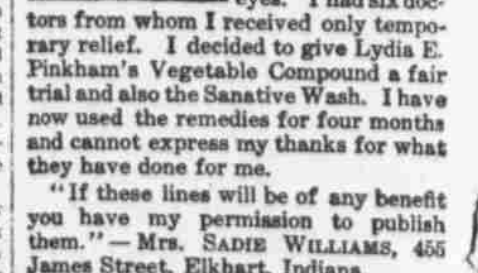
There are countless splendid girls—at home, in offices, in stores and on the stage itself—girls who are forced to earn their own living and who must look well, so that the men to whom they apply for positions will give them a chance to prove their ability. And what do you think these girls long for most in all the world? A home. A home and the protecting care of a man who will love them kindly and tenderly and so sincerely that they won't feel they must keep themselves up-to-date and beautiful and stimulating in order to hold his jaded fancy. Just stop looking at the "gay birds" of plumage who flutter about you in the artificial light of high powered burners. Turn to the quiet places and you will see countless doves and wrens and nightingales who have sweetness and meekness and fidelity and ability to work and help you make a nest.

There are a lot of butterfly and dancing men in the world—and there are villains and thieves and crooks and scoundrels and homebreakers and all the motley crew, but no woman ever denounced the whole masculine sex therefore.

MRS. WILLIAMS' LONG SICKNESS

Yields To Lydia E. Pinkham's Vegetable Compound.

Elkhart, Ind.—"I suffered for fourteen years from organic inflammation, female weakness, pain and irregularities. The pains in my sides were increased by walking or standing on my feet and I had such awful bearing down feelings, was depressed in spirits and became thin and pale with dull, heavy eyes. I had six doctors from whom I received only temporary relief. I decided to give Lydia E. Pinkham's Vegetable Compound a fair trial and also the Sanative Wash. I have now used the remedies for four months and cannot express my thanks for what they have done for me.



"If these lines will be of any benefit you have my permission to publish them."—Mrs. SADIE WILLIAMS, 455 James Street, Elkhart, Indiana.

Lydia E. Pinkham's Vegetable Compound, made from native roots and herbs, contains no narcotic or harmful drugs, and to-day holds the record of being the most successful remedy for female ills we know of, and thousands of voluntary testimonials on file in the Pinkham laboratory at Lynn, Mass., seem to prove this fact.

If you have the slightest doubt that Lydia E. Pinkham's Vegetable Compound will help you, write to Lydia E. Pinkham Medicine Co. (confidential) Lynn, Mass., for advice. Your letter will be opened, read and answered by a woman, and held in strict confidence.

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