

lished sericultural industry of that country. But American and European inventors have also produced processes and real artificial silk will probably come into use despite Japanese curbs.

The next step would be to duplicate synthetically the protein solution that the silkworm makes and make a real and wholly synthetic silk. Undoubtedly attempts are being made but success lies in the future.

Science News Letter, August 6, 1932

PHYSIOLOGY

Gland Extract Increases Body Growth But Not Brain

THE "BOOM FOOD" that formed the basis for one of H. G. Wells' earlier imaginative novels, causing gigantic growth in everything from human beings to hornets, might have produced huge creatures but would not have generated geniuses.

Such at least is the indication of experiments on white rats by Dr. H. S. Rubinstein of the University of Maryland Medical School. Dr. Rubinstein gave a number of the rats daily injections of extracts from the anterior lobe of the pituitary gland, which secretes a growth-speeding hormone. Litter-mates of the rats were kept as "controls," without the hormone injections.

It was found after ten weeks that the body-weights of the injected rats had increased appreciably over the weights of the controls. But when the rats were killed and their brains removed and compared, it was found that the injected rats had not gained brain weight in proportion to their gains in bodily growth.

Science News Letter, August 6, 1932

ASTRONOMY

Changing Constellations and Meteors Featured in Skies

Famous Perseid Shower is Expected to Reach Maximum on Night of Aug. 11 or 12 for Observers Throughout Country

By JAMES STOKLEY

THE MONTH of August does not depend for astronomical interest entirely on the eclipse occurring on the thirty-first. (*SNL, July 30, '32.*)

The summer constellations are beginning to disappear from the evening sky in the east and their places are being taken by those of autumn. The "Great Square of Pegasus" has begun to shine just above the eastern horizon. The "Northern Cross" in Cygnus, the swan, is high overhead a little to the east of the zenith. Still higher is Lyra with the brilliant Vega, while the star Altair in Aquila is seen just to the south. Near the southern horizon is Scorpius with the scorpion's tail curling toward the east. Just above the end of the tail is Sagittarius, the archer. Some of the stars in this constellation form what is often called the "Milk Dipper." This implement is inverted and the handle points toward the west point of the horizon.

Spica, the most brilliant star in Virgo, is very low in the southwest (in that part of the constellation not shown on the map) and above it is Bootes, with the bright Arcturus to mark its location. The great bear, Ursa Major, with the familiar "Great Dipper" is descending into the northwest. By means of the two

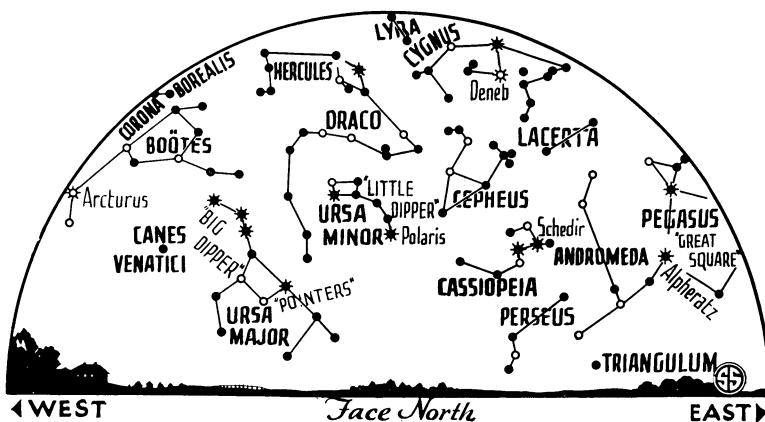
pointers, now the lowest part of the Dipper, we can locate the pole star, which is at the end of the handle of the little dipper, and forms part of Ursa Minor, the little bear. Cassiopeia, in the shape of the letter W, is seen to the eastern side of the pole, directly opposite the pointers.

Vega, Arcturus, Altair, Antares, the reddish star in Scorpius, and Deneb, the star at the end of Cygnus toward the north—these are the first magnitude stars now visible in the evening sky, and are the ones you should learn first if you want to know the constellations. In addition, August brings a planet to the evening sky. This is Saturn, famous for its remarkable system of rings. Just after sunset you can see it low in the southeast, below Altair, its steady glow making it distinctly different from the scintillating stars.

In addition to the stellar and planetary attractions scheduled, August is always of interest for the famous Perseid meteor shower. Because the earth turns so that we then meet them head-on, we can always see more meteors, or "shooting stars," after midnight than before. If you watch the sky for an hour on any night, you will probably see several of these bodies, which are really dust particles, most of them being no larger than a grain of sand or the head of a small pin, that are heated to incandescence and consumed in a blaze of glory when they enter the atmosphere of the earth. But if you watch the northeastern sky on the night of August 11 or August 12, you will see many more, provided the weather is clear and permits you to see any celestial objects. Then you may see as many as one or two a minute.

Astronomers who make a specialty of meteor study are always glad to receive observations from volunteer assistants. Just count the number of meteors you see during half hour periods, and send the numbers, with a full account of the circumstances under which the observations were made, to Dr. Charles P. Olivier, the University of Pennsylvania, Philadelphia, Pa.

Science News Letter, August 6, 1932



Ursa Major with the familiar "Big Dipper" is low in the northwest at this season, and the two pointers by which the pole star can be located are the lowest part of the Dipper.