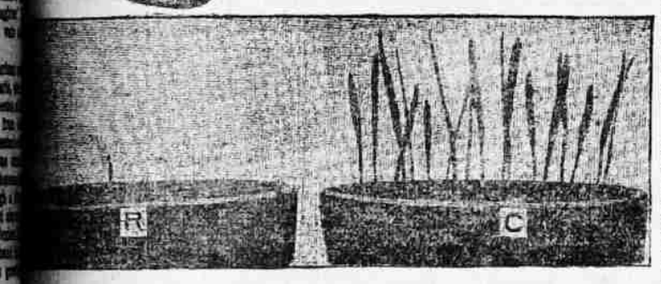
Our Radium-Raised Dinners

A Frog Bred Three Times Its Natural Size by a British Scientist Points the Way to Cutting the Cost of Living in Three

A Frog's Egg Made to Develop Into a Two-Headed Tadpole in Professor Roux's Experiments.



Professor Bailey's Experiments, Showing How Oats Treated with Radium Grew Three Times as Fast as Those Without It.

PROFESSOR DAWSON TURNER, at the recent meeting of the British Association in Birmingham, England, made the astonishing announcement that by treating a frog's egg with radium he had produced a frog three times the normal size of the species.

The application of this discovery may have several very important results for humanity. Perhaps its first, or at least the most obvious, value is that it will furnish us with a means of increasing the food supply and thereby keeping down the ever-increasing cost of living.

Even at its present stage of development the experiment is capable of greatly reducing living expenses. Frog's legs are delicious, succulent food similar in taste to fine chicken, and in many ways superior to the choicest quality of beef. Frogs are very easily raised, and when they are bred to a large size one leg will yield a dinner for a large family at very small cost, probably not more than ten cents a pound. Frogs are now quite cheap, and when increased in size they will become relatively cheaper.

It seems reasonably certain, however, that the process can be applied to all the food animals, including beef creatures.

A steer three times the normal size will certainly represent a very great economy in the production of beef. In fact, it has already been calculated by the scientists of the British Association that such an animal would cost one-third less than the present type, owing to the economy of feeding one animal instead of three and the great saving of time.

At present an important item in the cost of raising a steer is the fact that the breeder must wait for three years before the animal reaches a profitable size for food purposes. If the steer grew three times as large in three years it would be equivalent to a saving of one-third in time.

After the successful application of the process to many animals it will doubtless be tried on man.

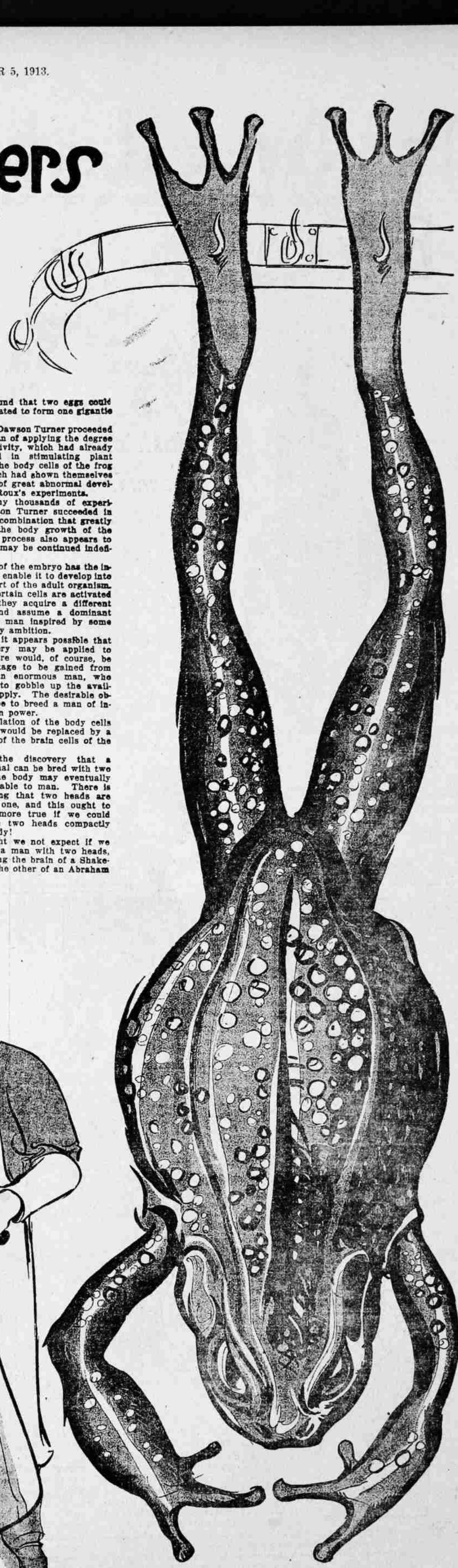
Of course, in its application to man it must be considered in a very different light from the mere increase in bulk.

A previous speaker at the British Association, Professor Dickson, had demonstrated that within another century the food supply of the world would at the present rate of consumption become insufficient to keep the race from starvation. Professor Dawson Turner's experiments showed that science would have at least one way of meeting the deficit.

Dawson Turner's experiments were a continuation of those already begun by Professor Roux, of the Pasteur Institute, Paris; Professor Butler Burke, of Cambridge University, and many others. At an early period after the discovery of radium it was found that this wonderful substance would promote growth under certain conditions. If radium of a certain strength be turned on a living animal, it has the effect of destroying micro-organisms, such as disease germs, and thus it favors the growth of the animal. If the radium has strong germicidal powers, however, its long-continued application will destroy the cells of the animal and the main organism itself. But experiment has now shown that the radium rays may be so modified as to exercise only a favorable effect on the animal's cells.

Other experiments have shown that radium will greatly hasten the development of plants. A tube of radium of 2,000,000 activity was buried in the centre of pot planted with oats. A second pot was arranged in the same manner, but without the radium. At the end of four days the plants from the radiumized seeds were three times higher than those in the unexposed pot, but here was another enigma. The tallest plants were those which were farthest away from the tube. The radium tube was then taken from one pot and placed in the other. Immediately the second plants began to grow, and within three days were taller than those in the receptacle from which the radium had been taken.

Professor Dawson Turner, in creating gigantic frogs and other monster animals, was especially guided by the experiments of Professor Roux, of the Pasteur Institute, Paris. Roux showed that the embryonic cells of animals were capable of being influenced in an extraordinary degree, so that the character of the resulting organism might be entirely changed. This was due to the individual intelligence of the embryonic cells, an entirely different thing from the intelligence of the adult organism. The intelligence of each embryonic cell strove to do its natural work in building up the complete organism. Roux manipulated the embryos by means of knife and needle. When one cell was separated from its companion cells it endeavored to do its normal work, and it often went strangely astray in the absence of its companions. Thus a body cell separated from the head grew a head. A head cell placed among the parts of another egg resulted in a tadpole, with two heads.



It was found that two eggs could be amalgamated to form one gigantic creature.

Professor Dawson Turner proceeded upon the plan of applying the degree of radio activity, which had already been useful in stimulating plant growth, to the body cells of the frog embyro which had shown themselves susceptible of great abnormal development in Roux's experiments.

After many thousands of experiments Dawson Turner succeeded in obtaining a combination that greatly stimulated the body growth of the frog. This process also appears to be one that may be continued indefinitely.

Each cell of the embryo has the intelligence to enable it to develop into a normal part of the adult organism. But when certain cells are activated by radium they acquire a different character and assume a dominant force like a man inspired by some extraordinary ambition.

In theory it appears possible that this discovery may be applied to man. There would, of course, be little advantage to be gained from producing an enormous man, who would help to gobble up the available food supply. The desirable object would be to breed a man of increased brain power.

The stimulation of the body cells of the frog would be replaced by a stimulation of the brain cells of the man.

Perhaps the discovery that a healthy animal can be bred with two heads on one body may eventually prove applicable to man. There is an old saying that two heads are better than one, and this ought to be all the more true if we could combine the two heads compactly with one body!

What might we not expect if we could breed a man with two heads, one containing the brain of a Shakespeare and the other of an Abraham Lincoln!

"Professor Dawson Turner's discovery makes it a possibility of the future that the housewife will be able to buy exquisite, succulent giant frog's legs at ten cents a pound instead of coarse, rheumatism-causing beef at forty cents a pound."

hat the Stars Promise for October

HE October lunation promises a kaleidoscopic time in political as well as other avenues. Every planet is above the earth, showendency of the ulterior forces.

occupies the quarter that will the underworld and make crime conflagrations will occur in and penal institutions, disgrace ach to those in authority thereof, malcontents will be much in looks as if a public functionary ind the bars.

affects legislators; official nce will be brought to the suralso much illness in these circles, an unusual death list.

is strongly posited in the second wherein she will benefit legitimate ial enterprise, and a general of expenditures will infuse new domestic trade relations, and affairs will be on the whole tory, with agricultural prospects ighter than the earlier part of on gave reason to expect.

near the following days are r incidents:

r 2—A railroad calamity in the fire department unusually d excitable happenings in public gs; a public building disaster.

r 3—Excitement on the market; re of a financial house. A period surrounds these early the month, more likely in the n States, and the autumnal ele- will be much in evidence. s had better take notice.

r 4—Very active for the social with some function of this nature ct notice; may concern the House. A benefit to the navy, , or a special appropriation.

r 7—Fine weather from this to a lower temperature and snow in northern latitudes on 10th A social scandal publicly aired the 11th.

r 13—A diplomatic imbroglio, ins at a breaking point. The poorizon unusually disturbed, with stationary in the heavens.

r 15-16—The public mind and eorological conditions equipoised Jupiter regime. A satisfactory ent in the financial world, marlish. A public bequest announced.

r 19—Of pleasant social augury, of that nature in higher circles, ested by the Sunday publications.

r 22—Travellers on a certain Eastern line of transit had better look to their accident insurance. Market and weather conditions much upset, a condition that extends practically to close of month, with temperature and quotations very much lower between 25 and 28th, inclusive. Railroad travel dangerous around the 27th, especially on electric lines.

October 26—Death of a public functionary, with the Coroners' calendar augmented. Autumnal storms due at immediate close of month.

During October Jupiter will rule benevolently in the lives of those born in the early days of January, March, May, September or November of any year. Business and personal affairs may be pushed with confidence, favors sought, while those of the fair sex so disposed will entertain new admirers; these natives may safely make investments, enter partnerships and form new friendships, a good organizing influence that should be taken advantage of.

Much caution will be advisable this month if born between the 7th and 11th of March, June, September or December of any year; business and personal affairs will be dull and tedious, the mental and animal spirits depressed, and in some instances the health affected, for Saturn, throwing an evil ray to their sun, will vitiate the magnetic aura and render them susceptible to ulterior influences; attempts to force interests will but bring a stronger opposition to cope with. While general, this has an especial application if born in '62, early '63, '69, '71, '77, early '78, '82, '84, early '85, '91 or '99. I thought well to designate these years as being of special importance.

People born in the first three weeks of July must be careful of burns, scalds and about water; home affairs disturbed for same.

The 2d shows accident or feverish complaints in the coming year of life; money losses if born on 2d-3d; preferment if born beneath 4th and 9th; bereavement if on 10th-11th, but with probable legacy accruing therefrom; females born on these dates will have affectional disappointments or domestic anxieties.

The 14th to 19th are excellent birthdays, as also on the 23d-24th. The 20th-22d are unfavorable, showing loss in business or speculation, as also between the 25th and 31st.

Those of the fair sex born near the close of January must be very careful throughout this Winter in attachments; men of business reversal; each should avoid radical changes of any nature and keep matters as near to the accustomed grooves as possible.