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WASHINGTON, April 18.— (Special Correspondence of The Sunday

which Professor Elmer Gates, of this city, says he has discovered now has the medical world very much by the ears.

By subjecting animal matter to certain chemical rays, Professor Gates says he has demonstrated that a living body will shadow, whereas a dead body will not. In other words, flesh pulsating with is to these new rays as is metal to the X-rays, whereas dead flesh is as transparent to their light as is paper or leather or flesh itself to the X-rays.

Making the New Rays.

These new rays are not X-rays, although they are non-luminous. They are produced quite differently, and although akin to the X-rays they are about as different from them as they are different from sound. Since 1891, he says, be has been experimenting with light rays about five octaves above the violet light seen when a ray of sunlight to passed through a prism. Lest this sound technical to the layman, let it be explained that the vibralayman, let it be explained that the vibra-tions of light are grouped in octaves, just, as are those of sound. Of the seven fun-damental colors cast by a prism pene-trated by sunlight, the rays of the red have the slowest vibrations and those of the violet the most rapid. So limited is the scope of the human eye under ordi-nary conditions that it cannot perceive rays of light slower than the rad or force rays of light slower than the red or faste violet. Some of the lower and mals are supposed to have greater scope, however, particularly those which prowd in the darkness, and which are believed



PROF GATES IN HIS LABORATORY

lead connected with the earth by elec-tric conductors passing through a gal-vanometer sufficiently sensitive to meas-ure the amount of electricity emitted by

Live Body a Bundle of Electric Im-

That the body, in every muscle and nerve, is electrically excited whenever nerve, is electrically excited whenever exercised he demonstrated, according to his statement, with this apparatus. Every muscle and nerve appears to be an electric conductor. If a person lift his arm and keep the muscles tense they give off more electric energy than when kept at rest. During exercise of the mind even there appear to be similar electric discharges into the surrounding atmosphere, and if two brothers were sent separately into this lead-lined room, being there told for the arst time that their mother was dead, the galvanometer would probably show which of the two would suffer the greater emotion. So then, in the livthe greater emotion. So then, in the liv-ing body of any animal—man or beast— there are electric waves hurrying in all directions through the nerves and muscles. Light waves, which, too, are electric waves cannot penetrate such a bundle of electric impulses, according to Professor Gates.

When a live rat, for example, is placed in a hermetically scaled glass tube, held in the path of these rays and before the sensitized wall, a distinct shadow is al-

tions are registered in a scale of colors. These rays may be of great use to physicians not only in determining whether a person is actually dead, but in locating dead tissues within the body—specially a dead foetus, the professor believes. In the opinion of medico-legal authorities with whom the writer has discussed the problem, an unimpeachable proof of death is greatly needed. The most popular means of making tests are the phonetoscope, by which the least heart murmur can be heard, the ophthalmoscope revealing in the eye certain changes resulting from death; the cold mirror, flake of cotton, or feather applied to the lips for evidences of breathing; the vessel of water or mercury placed upon the abdomen to reveal slight movement, and the holding of the hands against the sunlight to determine whether they are still translucent. er they are still translucent.

Other New Death Tests.

Another new means of proving death was suggested lately when the professors, Charpentier and Blondelot, of the University of Nancy announced that the human body emits rays similar in nature to those of radium rays, and which are increased in strength when we grow

increased in strength when we grow strenuous with our muscles and nerves. It was thought that this discovery would enable physicians to decide beyond a doubt whether life had departed from the body, which, if dead, would show no rays under the apparatus.

Another new test is that of Dr. Augustus Waller, who finds that when he sends through the body of an animal a current of electricity escaping through a sensitive galvanometer a "back rush" of current is perceived in the case of living tissue, while no effect is obtained in the case of dead tissue. Experimenting also with eggs, he finds that those which are non-incubated, sterile or putrefied, do not give this "back rush" of current, while an egg containing a developing chicken did so.

No Pulse, Breath or Heat for Days, Yet Allve.

A positive death test is most needed in cases of catalepsy, in which death is often so closely simulated as to de-ceive skilled physicians. There are such cases where there can be discovered no pulse, no heart beat and no respiration. The face becomes pale, the eyeballs fixed and the inexperienced in the path of these rays and before the physician is apt to pronounce the pa-sensitized wall, a distinct shadow is al-tient dead. Yet during this condition relatives might take their last look leged by the inventor to be cast by the the cataleptic is aware of all that is before burial. While they were weepthe dispects in the flar for ray whose vibrations are slower than the red. So, then, the "ultraviolet" rays which the claims to be more nearly an experimenter says he has been using in these texts are about five octaves highly experiment to the red of t

after premature burial there is no lack of well-authenticated evidence. A woman, who had been placed in a family vault in Magdeburg, Germany, reily vault in Magdeburg, Germany, re-gained consciousness during the night succeeding her burial. Finding the vault unlocked, she fled to her home, whete she lived many years after her frightful experience, which is com-memorated by a monument in the Lutheran cathedral of that city. Since this event it has become the custom in certain parts of Germany to place a bell above the public vaults and to fasten the hand of the ostensible corpse to the rope, that it may be

corpse to the rope, that it may be rung in the event of a revival of con-sciousness. One dark night in Berlin, the bell of one of these "mortuary vestibules" rang violently, and the care-taker, who had been but a few days at his post, became greatly excited. He ran toward the death chamber and as soon as he opened the door was con-fronted by one of the corpses, envel-oped in a shroud. This corpse, who had been a soldier of the Foot Guards, was able to join his regiment five days

A Colonel Howard, of Castle Howard, County Wicklow, Ireland, was placed in a lead coffin, ornamented with a plate bearing his name and the dates. Fortunately he returned to life before entombment and as a warning to his servants against hasty burials, he had his coffin-plate fixed over his kitchen chimney.

A more familiar case is that of B. E. Chandler, W. S. N., who some years ago was pronounced dead, after an illness of some days, at his home in Long Island. An undertaker was called in and instructed to embalm the body; but no sooner was the embalming instrument applied to his flesh than the strument applied to his flesh than the communder reached out his arms and asked: "What's all this fuss about?" The terrified undertaker fled without picking up his tools, and the com-mander forthwith called for an oyster

stew.

A Chicago drummer named Carl P.
Swartz fell ill and was pronounced dead in a little notel in Minneapolis.
His remains were shipped by express to his Chicago home, where the coffin

Personal Recollections of Judge George H. Williams

No. XXI. The Rations Indeficiences to Believe in the Rations Indeficiences to Believe in the Ration Indeficiences to Believe in the Ration Indeficience Indefic

of business, and in many respects was the impersonation of "grim-visaged war," He seems in a large measure to have possessed that spirit which King Henry V tried to infuse into his soldiers when, according to Shakespeare, he said:

Musings for Three Minutes Evolution of Alcoholic Drink in Connection With Political Campaigns.

AN you imagine how stupid a po- have contributed to American civilization. litical campaign would be without Far from it. Some fellow that wanted to its lager beer and pretzels? What be doing something and was not satisfied sound is so cheerful and welcome to the with black bass, wall-eyed pike or dog weary son of toil as the cry of the can- salmon for his Friday meals, had to in-

the mail about Statement No. 1 and the Primary Pledge. You go into any Post-office after the mail from Portland has been distributed and you will see several Yahous who never before received a type-written letter taking one off into a corner and with a scared look trying to figure out what it all means. Campaigns in the good old days used to be foyous affairs, but the tendency now is to put everybody back into the kindergarten and Primary Pledge. You go into any Post-office after the mail from Portland has and with a scared look trying to figure out what it all means. Campaigns in everybody back into the kindergarten and "I went away from here 29 years ago a make them think. The strain is going to be too much for some of us, however. in my pecket. I walked the four miles from my father's farm to the station, and there I begged a ride to Boston on a freight car. Last night I drove into town behind a spirited pair of horses and my purse guess how much my purse holds is money today, besides a large check," and Mr. Jameson looked about him with a helliant amile. charged the duties of Secretary of War as well amid the open dangers of the great rebellion as at a later period when assailed by opposition inspired by notifity to the measures of justice and pacification provided by Congress for the restoration of real and permanent Senator Hendricks attacked the restoration of real and permanent peace."

Senator Hendricks attacked the restoration for regulating to praise Mr. Stanton did, but the clamber and the accuracy of his ingreat labor and the accuracy of his ingreated as to do b

didate, "Come on, boys"? And who has troduce German carp to a long-suffering given this to America? Why, the German, community. Mr. German Carp had hardly of course. Before the German came, the been naturalized before he had put all of course. Before the German came, the blue-nosed Yankee was accustomed to take a demijohn and fill it up with corn take a demijohn and fill it up with corn when he wished to treat a few friends a creek has to keep a sharp outlook over the corn for on a foggy night the on a campaign trip. Now he takes a lard pail and rushes the growler. Such his hay crop, for on a foggy night the carp will come in on the fog, eat up the hay and get back to the creek before

But in Oregon at least all this has been changed, and all through adopting some fool Populistic notions. Just see what we are coming to: instead of the voters being called to the bar to satisfy their thirst, they get a long disquisition through the mail about Statement No. 1 and the

I believe that I started to discuss the Germans. Well, the Germans are no be-lievers in race suicide. They go in for lievers in race suicide. They go in for what has been aptly called the Belgian hare ideal of a family, which is all right in a new country but rough in a thickly-

settled one.
Sourkrout. limburger. wienerwurst, smierkase: what foud memories and smells do they call to mind.
MARCUS W. ROBBINS. Grant's Pass Or.

Empty Bottle's Mute Story.

Exchange.

A man had been employed to make an inventory of the furniture in the house. He was so long about his task in the parior, however, that the mistress of the