HOW UNCLE SAM FIGHTS DISEASE by Edward B. Clark

United States and disease and death stands the government's public health service. Perhaps will be urged that the great body of physicians of the United States is the real safeguard of the people. This is in every high sense true, but in support of the first seemingly wide-reaching

statement let it be known that the physicians of the public health service engage themselves faithfully and with proved efficiency in the labor of prevention of which, as the time-tried saying has it, an ounce is worth a pound of cure.

The surgeons of the public health service are not only sentinels in the field of warfare against disease, but they are the advance guard of the soldiers engaged in the fight. The campaign records show that on many fields by early victories they have made great battles unnecessary. It is a large part of their duty to overcome the enemy on his first appearance, and in many instances to make impossible his appearance in the field which he seeks to sow with the germs of disease which are his weapons of offense.

In the popular prints one reads columns of the activities of government in preparations for possible war. There seems to be a delight in dreadmaughts and abiding interest in battalions. Of

the life-saving functions of the government one reads little. The work of the medical service is as devoted and more dangerous than that of the soldier. The doctor in his investigations, experiments and ministrations faces death in the time of peace, and in the time of war the surgeon with the soldier is on the battlefield. There is a living interest in the daily work of the public health service of the United States. It is carried on for the benefit of all the people, hundreds of thousands and perhaps millions of whom know too little of the labor in their behalf.

The public health service of the United States is a bureau of the department of the treasury. It falls directly within the office of assistant secretary of the treasury, Byron R.

Newton. The surgeon-general of the service is Rupert Blue, whose research applishment in lines of medical endeavor are well known to the profession. There are six assistant surgeon-generals, Doctors A. H. Glennan, W. G. Stimpson, L. E. Cofer, J. W. Kerr, W. C. Rucker and J. W. Trask. They are all stationed in Washington and have direction over the various branches in all parts of the country.

Recently in the medical council there appeared this brief but conclusive statement of the manifold functions of the public health service of the United States government:

"Co-operating through the health authorities of the states, the service collects data upon the prevalence and distribution of disease, administers interstate quarantine, suppresses epidemics, conducts research work, maintains national quarantine, examines immigrants, regulates the manufacture and sale of biologic medicinal products in interstate traffic and furnishes medical treatment to various branches of the government service. Officers of the service may be assigned to duty in any part of the world."

It is the intention in the present article to take up and describe only one of the works and fields of labor of the public health service. The waters of Chesapeake bay and its inlets and tributaries form the field of an enormous industry. It is from these waters that are taken a large part of the shell fish approved as a delectable food by thousands and perhaps millions who never saw salt water. How many Americans nodding with the approval of appetite over their oysters on the half shell know that it has been made a matter of government concern that the shell fish should be a food as safe to the health as it is grateful to the taste?

It has been said that the American people show great interest in a dreadnaught, a big ship built for offensive purposes, and, if it is not putting it too strongly, mainly for the sinking of other ships and their crews along with them-a killing purpose. Is it not to be hoped that an equal if not a greater interest may one day be created in the little ships of the government whose only work and only purpose are saving ones?

In the control of the public health service is a little ship called the Bratton. It bears the name of a surgeon of the service who did commanding work for mankind in a great yellow fever epidemic and who laid down his life for humanity. The scene of the Bratton's activities is on the waters of the great shell fish producing bay which washes Maryland and the tributaries thereto. It is one of the ships helping to guard the lives of ninety millions of people.

The work of safeguarding the shell fish beds from pollution and thereby performing the work of prevention at a source from which danger frequently springs, falls in the field of direction of Assistant Surgeon-General J. W. Kerr, "ir charge of the division of scientific research." To give an idea of the immensity of the field of precaution, prevention and cure coming under the direction of one man it may be said that Doctor Kerr's duties as set forth in the organization chart of the service appear as follows: Laboratories; leprosy investigation station, Hawaii; hygienic laboratory, Washington, D. C.; division of chemistry, zoology, pharmacology, pathology and bacteriology. Field investigations: Diseases affecting man, pollution of streams by sewage and industrial wastes, rural hygiene and school hygiene.

The services of the good ship Bratton are given

GENERAL J.W KERR GENERAL RUPERT BLUE

ONE OF THE

HEALTH

ABORATORIES

OF THE PUBLIC

SERVICE

SURGEON HUGH S. CUMMING, IN

COMMAND OF THE SHIP BRATTON

ent and past conditions of health of the commu-

nity, whether or not typhoid and other com-

municable disease are or have been prevalent,

the number of cases of such diseases and their

location, the general sanitary condition of the

houses, the land and the inhabitants. It is a

comprehensive work and it is carried out in every

locality where there is a thought that danger may

an experiment station. It is a well and pictur-

esquely located building, fitted with all the need-

ed appliances for the scientific work which there

is prosecuted. At a little distance is a building

which is used for a tank house in which are

placed all the material which is to be the sub-

lect of bacteriological and chemical examination.

From the beginning of each working trip until the

final results of the examinations of the material

collected are known, the work of the service men

is most thorough. Nothing is left to chance and

nothing is omitted which might in any way help

In this study of possible shell fish bed, or water

pollution, the public health service has conducted

some work in the Mississippi sound. In the time

to come unquestionably the field of labor will be

widely extended. The value of the service is un-

questionable and it has been so recognized by the

scientific world. The shell fish industry is an

enormous one and it is of surpassing value. The

public health service not only works for the peo-

ple, but for the industry itself, which, of course,

cannot thrive if its product becomes charged with

danger to the public health. In a word, one of

the great works of the public health service is to

see to it that one great part of the food supply

The reports of the public health service are

made public and the government and the individ-

ual states profit by them. In the agricultural de-

partment there are two governmental agencies

which make use of the information which the

public health service supplies. There are pure

food and sanitary laws in the United States and

there are means of reaching offenders against

them. Three departments of the government, the

treasury, agriculture, and, if occasion requires,

the attorney-general's department, constitute a

partnership of correction and, if the case justifies,

The Bratton is a small ship, but under the di-

rection of the service and of its complement of

scientists it is doing a great work for the public

health of the people of these United States of

Cerberus was barking at the gates of hades.

hope they won't tax me for three dogs this year.'

Even he had his troubles.

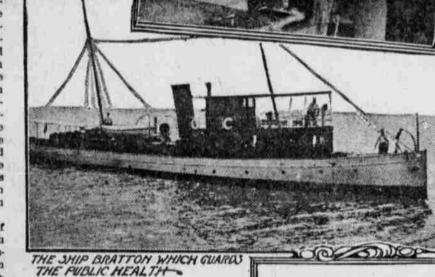
"He's all right," Pluto ruminated, "but I do

of the United States is made and kept safe.

the safeguarding labor.

of prosecution.

At Cape Charles the public health service has



search. Dr. H. S. Cumming is in command of the coastal work of this ship which means so much to the

of scientific

STATION OFF CAPE CHARLES public, which perhaps knows little of what is being done in its behalf. This ship's commander is also a doctor, a surgeon and a scientist. On the ship knowledge is trained against the enemy. The Bratton's cruises are made in behalf of the welfare of American citizens and they constitute no menace to the coun-

PUBLIC HEALTH EXPERIMENT

try of any people on earth. It is the first duty of the Bration to safeguard the oyster industry of the waters in which the ship sails. Safeguarding the oyster industry means safeguarding the health of the consumers of oysters and other shell fish. In 1912 a law was passed which gave into the hands of the public health service the work of field investigation into the causes of diseases affecting man, and the duty of enforcing rules of safety at the sources of trouble. Under the same law the service was charged with the work of the study of the pollution of streams by sewage and by industrial wastes. The work in connection with the oyster industry falls within the field of the duties imposed upon the service by this law of 1912.

The Bratton steams all through the coast waters of the Chesapeake, making incursions into the inlets, bays and tributary rivers. Under the direction of the surgeon in charge shell fish are taken from the beds at all the sources of supply. With them are taken samples of the water at different depths and also samples of the material which forms the bed of the coastal waters, the bays and the streams at the points where the test is to be applied.

Bacteriological and chemical examinations are made of the shell fish, the water and the bottom material. The bacteriological examination is the most important. It discloses the total number of bacteria and the number of colon bacilli which are present. The presence of colon bacilli in great numbers shows the presence of fecal matter and arouses instant and earnest attention and painstaking examination and report.

The layman probably knows in a general way that typhoid fever through the method of its introduction into the system is one of the grave dangers which threatens the people through its food supply. It must not be supposed for a moment that the work of the scientists on the Bratton cease when they have taken their samples and have detected the presence of elements which may constitute danger to the public health.

When there is suspicion that the coastal waters, the shell fish bed, or the waters of a beach which are used for bathing purposes by the people, are affected by dangerous deposits, the land whose drainage flows into the suspected waters instantly is studied. All useful information concerning it is obtained and means are taken to correct conditions which have contributed to the pollution of the waters or have wholly produced it.

* The study of the section of the land which is suspected of supplying through its drainage the matter which on deposit becomes a menace through the shell fish supply or otherwise to the public health, comprises an inquiry into the presAQUATIC

Vivian Nickalls, coach of the University of Pennsylvania crew, is negotiating with his brother, Guy Nick alls, who coaches the Yale crew, for a race betwen the two colleges on

WRESTLING

Johnny Billiter has won another wrestling champlonship. What of it? That's what we say, what of it?

Manager Jack Herman regrets that Zbyszko has seen fit to dodge German and Austrian bullets, for he says the wrestling game looks good for the

BASEBALL

Rabbit Maranville may go on the stage this winter.

The statements made by President Gilmore that the Feds drew 1,600,000 fans during the year in the eight ball parks is regarded as fact. This means that each club averaged 200,000, which is not a large average by any means.

McGraw received a letter from Tilly Shafer from California intimating there was a chance for him to get back into the game with the Giants next phia. year. The letter made the Giant leader feel very good.

GOLF

A Santa Barbara (Cal.) hotel advertises it has three kinds of golf in connection; probably bad, worse and

About January 1 the golf bugs will lay up their tools for the winter, taking them out again about January 15, however, for early spring practice. You can't stop 'em.

Detroit is regarded as the almost certain location of the next amateur golf championship, as the West has had but one in the last five meets. The Detroit course is that regarded by Vardon as the best in America.

HORSE RACING

J. L. Dodge will drive his mare Lady Wanetka, 2:10, next year.

J. Malcolm Forbes is to be tried Guess I'd better quit." again, this time by Geers, who will see if the stallion can come back.

Murphy was 42 times first this year, holes, Mike." the line at the pay window.

will be in the Murphy stable next year.

Driver Thomas Murphy won over one hundred thousand dollars in son. Of this Peter Volo, an unbeaten three-year-old, contributed most.

......................... **PUGILISM**

tempt to make 122 pounds again.

Sam Robineau, the Philadelphia lightweight, has been making a nice field. showing in the six-round game in the Quaker city.

Harry Foley claims he has discovered a wonderful boxer in the person of Ralph Grunau, a lightweight of Portland, Ore.

Eddie Shevlin, the Boston welterweight, who has been boxing instructor at Dartmouth college, has resigned to accept a similar position at Cornell.

Now "One Punch" Hogan clamors for pugilistic recognition. If he's anything like "One Round" Hogan somebody will put the reverse English on that name pretty quick.

Eddie McGoorty had hardly landed on American terra firma when he began to hurl deflance at Chip, Clabby and Mike Gibbons for the middleweight championship of the world.

It looks as if Jim Flynn, the firemanfighter, is about all in. Jim, who has been battling for over thirteen years, has met all sorts of fighters and always gave a good account of himself,

FOOTBALL

The only way to win greenbacks on a football game is to pick one team to win and then bet on the other.

Dalton, former captain and kicking star at West Point, helped coach the University of Pennsylvania punters early in the season.

for several years had charge of the football team at Ithaca. Hubbard Bushnell, Michigan quarterback, married Miss Adelo Johnson

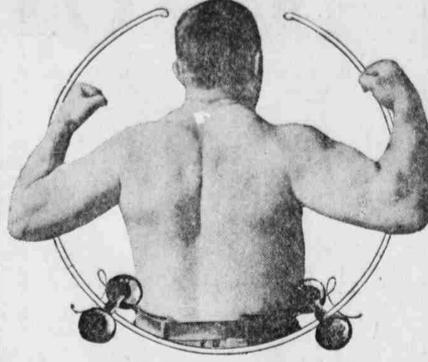
Glenn Warner, the Carlisle Indian

coach, is an old Cornell player and

Oddly, the further we "develop" our football, the closer we get to the kind they have played in England since

Robert A. Fowler, assistant trainer of the Harvard football team, who several years ago was well known as a distance runner, has been signed by the Princeton athletic management to coach the Tiger cross-country team.

STRONG MAN AT PENNSYLVANIA IN BAD



Mike Dorizas, Strong Man of Pennsylvania.

(BY FRANK G. MENKE.) "The Reversal, or Changing from a his foe to "pardon me, old chap."

make a valuable footballer. Mike gave ram. the game the up and down a year or so ago, and decided that he didn't care much about it.

However, extreme pressure was and at last, Mike jumped into the spring on him. Mr. Busch it may be moleskins, was put through a course stated, didn't know that Mike's actions of stunts and handed a football diplo- were influenced by a tender regard job on the Pennsylvania line.

Mike nearly squashed a couple of his foemen during the early games this year when Pennsy was pitted He bunged up a couple of foes and it wounded his tender feelings.

"Looka here," said Mike some being in the game ain't a square deal bandage over his head. for those other fellows. I'm so darned and I don't want, to hurt anybody.

"Nix on your quitting," remarked the Pennsy captain. "Never mind about hurting the other fellows. This Cal Shilling, America's best jockey, isn't a game of ping-pong. When you who was suspended a year ago for hit the line hit it and hit it hard. rough riding, may be reinstated by Your mob is to make holes in the line so some of our halfbacks can get through. You go and make those

32 times second, 26 times third, 12 Well, Mike continued in the game, a little while ago and I know that it's times fourth and 41 times outside of but Mike wasn't the same Mike of Mike because I was close enough to early in the season. Mike showed hear Mike's voice and the voice came too much gentleness in the game. from the same fellow that you see do-Peter Pearl, 2:09%, winner of the Mike made openings for his backfield ing that limping." \$1,000 stake for 2:24 trotters at the De men whenever called upon to do so. troit short circuit meeting in June, but when he did he usually lifted his

rival out of position and then asked

Lamb to a Lion" ought to be the title | And then came the Carlisle game of this squib which concerns Mike Mike found himself opposed to Busch, Dorizas, who footballs for and gets his the deposed captain of the Indian book knowledge at the University of eleven. Busch didn't size up as any Pennsylvania, which is in Philadel more powerful in Mike's eyes than did some of the other foes against Mike is a Greek and he's a strong whom Mike had been pitted and Mike, Greek. Mike busted all kinds of lift- during one of the opening plays, ating records, weight throwing records tempted to shoulder Mr. Busch out of and strong man records at Pennsy and the way instead of ramming into Mr. everybody thought that Mike would Busch just about as hard as he could

Mr. Busch was very much surprised at Mike's early conduct. He couldn't quite "make" Mike. He puzzled over it for a few minutes, trying to figure brought to bear upon Mike this year out just what Mike was trying to ma which entitled him to a regular for the physical welfare of his foes. He thought it was some trick Mike was attempting.

As stated, Mr. Busch tried to figure out just what Mike was putting over against some of the smaller elevens, on him. He failed to figure it out, Miles, with his tremendous strength, and dismissing the question from his rode rough-shod over his rivals when- mind, he set about playing football the ever rough-shod riding was required. way that football should be played.

Well, on the Monday following the Pennsy-Carlisle game, a modern Hercules was noticed limping across the weeks ago to Captain Journeay. "My Pennsy campus. He wore a huge

There was a huge gash on the strong that I hurt the other fellows forehead of this modern Hercules, there were bruises on his body, there were aches and pains in every joint and one knee was so swollen that it made walking a laborious task.

"Who's that fellow," queried a spec-

"Mike Dorizas," answered a student. "Mike, did you say? It doesn't look like Mike."

"No, it doesn't but it's Mike just the same. I was in the dressing room

'Street car hit Mike?" "No, a fellow named Busch did it."

purses on the harness circuit this sea. Name of Athletic Field Changed to Commemorate Work of Noted Coach and Member of Faculty.

The board of trustees of the University of Chicago has announced the result of a vote at a recent meeting. It is doubtful if Johnny Kilbane, the when it was decided to change the featherweight champion, will ever at official name of the football, baseball, and track athletic grounds from the

> In commenting on the reason for the change in name, members of the board of trustees authorized the statement



Prof. Alonzo A. Stagg.

that the action had been taken as an indication of the place held by Director Stagg in the esteem of the Chicago students and alumni, and to commemorate his work in the firm establishment of intercollegiate athletics on a successful basis at Chicago.

Prof. Stagg went to the Midway in 1892, when the university was founded, and has held a place at the head of athletics ever since. He is ranked as a full professor of the university faculty, and holds the position as director of athletics and head of the department of physical culture.

Referee Caught In Crush.

In the New York University-Haverford football game Referee Ed Thorpe ers to secure Yale's new stadium for for time out while he recovered from arrangement would be ideal. two severe smashups. The intricate formations and trick plays employed by Haverford developed so quickly that before Thorpe had an opportunity to judge their legality he was At the close of the game Thorpe limped to the dressing room.

HONOR FOR ALONZO A. STAGG | AMATEUR RULE CAUSES TALK Billiardists Have Varied Ideas on Subject of Ball on Line in Balk-

Line Contests.

Morris D. Brown, national amateur champion in 1912, is an uncompromising advocate of a rule that will provide that in balk-line games between amateurs a ball on a line shall be decided "out." At the annual meetformer title of the Athletic field of ing of the National Association of Amthe University of Chicago to Stagg ateur Billiard Players he made an unavailing effort to have such a rule adopted.

Defining his attitude, he says: "The game of billiards is a gentleman's game, essentially so as an amateur pastime. Every gentleman will concede every other gentleman the benefit of a doubt. There always is a doubt as to whether a ball called on a line is actually in such a position. I contend that no human eye can accurately determine the question.

"I consider the rule defining a ball on the line as 'in' objectionable. The professional motto 'as fair one as the other' does not appeal to me. The chief argument against my motion was that the rule as it stood was established when balk-line was introduced and had ever since applied in both professional and amateur contests.'

SLEEPY BALL PLAYER FIRED

Vic Willis Was Sound Asleep When Umpire Emslie Ordered Him Banished From the Field.

There is only one instance on record of an umpire putting a man out of a game who was asleep. Vic Willis was the victim. Vic was with the Boston team, and the players on the bench were warbling at Emslie every instant. Bob was listening hard, striving to identify the culprits and keeping an eye toward the bench. Finally he whirled and called out:

"Willis-off the field. Get out of

there!" The Boston players suddenly became convulsed with mirth. Emslie rushed to the bench to enforce his mandate, and there was Willis, sound asleep and snoring, with his head resting against the side of the bench. Emslie had to wake him up and order him off to make good.

Place for World's Series A rumor from the East says efforts have been made by several club own-

was bowled over twice. Each time he the 1915 world's series. So far as found it necessary to blow his whistle the seating capacity is concerned, the Americans Lost Heavily. A prominent American league mag-

nate is authority for the statement that every club in the organization. caught unawares and knocked over. with two exceptions, lost heavily this season. He declared the Athletics are \$30,000 in the hole.

Lack of Ideals Responsible for Succession of Defeats During the Balkan War.

tirely unimpressed by the prospect of were driven back from the Adriatic They are abruptly shaken down. They eletery; and yet, in spite of this feel- to the shores of the Marmora. in , in smic of all the excitement, our | We do not wish to attribute to just | to defeat, as we did during the Balkan | nal

POINTS OUT TURKEY'S FAULT | social status showed every sign of a one cause all these disasters; but any | war. The unshaken faith that gives a year ago, but kept the marriago selack of ideal. What advantages were how if the lack of a national ideal was a nation an ideal, compensates for the cret. we to reap from the successes we not the only cause, it was one of the loss of material forces, and allows one were to gain? Nobody knew, in fact. main causes of our defeat. A nation to look calmly at overturnings.-Coneverybody thought of other things. cannot be founded simply on material stantinople Tasfir i Efkiar. Apparently even all that overturning forces; for material things change At the opening of the Balkan war was not enough to awaken the na- easily. Social organisms that depend Ottoman public opinion did not show tional conscience or rouse in public entirely on their material forces, and solidarity, and this not alone from the opinion the sublime spirit of unity. are entirely without any strong moral political point of view, but also so Precisely for that reason we were basis, any great faith, cannot find any cially. True, our hearts were not en beaten and ruined; that was why we standing ground at a time of change.

married woman in New York cociety." "And her husband?" "Well, of course, she gets plenty of admiration. He is said to be the remain impotent, they go from defeat grouchiest man."--Kansas City Jour-

Tom Brown's day. Troubles of His Own. "She is said to be the handsomest