THE MARBLEHEAD FIRE. THE ENTIRE BUSINESS PORTION OF THE TOWN DESTROYED.

THE ORIGIN OF THE FIRE UNKNOWN -THE LOSS ESTIMATED AT

MARBLEHEAD, Mass., Dec, 26 .-This town was visited by a conflagration last night that deveured the entire business portion of the town-about 12 acres. The fire was first discovered in the housefurnishing store of D. R. H. Powers, on Pleasant street, at about 10 o'clock, The direct cause of the fire is not known. The first warning was announced by a loud explosion of naphtha in the store. The alarm was quickly rung in and immediately followed by a second and third. When the firemen reached the burning building it fell with a mighty crash. It was a wooden structure and was rapidly consumed. The firemen did their best to hold the flames in check, but their efforts amounted to nothing. The buildings surrounding the structures were nothing but mere shells, and it seemed as if everywhere a spark fell a fire started. In 15 minutes from the time the first alarm was rung in the entire business portion was a sea of flame. The fire raged flercely, and the two companies were wholly of no avail to fill the task they were called upon to perform. Assistance was summoned from Lynn, Salem and Swampscott, and these towns quickly re-The entire shoe manufactureing

district, the principal business of the town, was burned to the ground. Fully 60 buildings were consumed. flames spread with sutch rapidity that scarcely anything was saved. The tenants residing in the dwelling houses were completely cleaned out, and as they stood watching their homes consume they presented a pitiable sight. The fire, after demolishing the building in which it started, swept directly across to Rechabite Hall, which is totally burned. From there it swept over to W. B. Brown's house, which marked the limit of the fire on the western side. The wind was, most fortunately, light, but the roaring mass of flame swept over to F. W. & J. W. Monroe's shoe store, on the opposite side of Pleasant street. The building was a wooden structure, four stories high, and was soon burned to the ground. In the midst the shoe factory of Charles Reed, to the west, caught and was burned to the ground. The progress of the fire was checked upon this side at that point, but, it swept uncontrolled to the eastward, and the flames soon reduced l'aine's express office to a mass of ruins. Thus it continued. Sheds, fruit stands and small tenement houses were consumed with rapidity. It seemed as if the entire town was doomed. By this time help from Salem, Lynn and Swampscott arrived, and this response put new life into the cheerless workers, The city was flooded with strangers from all the surrounding towns. On Pleasant street the dwelling houses instant death of at least four men and of Nathan Pitman, Asa Blaney, the Boston and Maine Depot, Cole Brothers' shoe factory, the horse employed in excavating a ditch six feet car station, Stacey's drug store, Jona- deep along the side and underneath than Bourne's woolen factory, a large the track of the cable car line. Sudstructure, four stories high, and nu- denly the track for an entire block merous small buildings were reduced to ashes. On the opposite side Joseph Lefavre's dwelling house, H. O. Symond's hardware, the Grand Army Hall and the Fire Department headquarters, a magnificent brick building; Rialto block, C. Gregory's store, the Boston branch drug store, the grocery store and the dry goods store of George Graves were destroyed. On Essex street the flames destroyed Allerton Hall and the immense wooden factory of E. H. Woodbury, shoe manufacturer. Allerton Hall is occupied as a shoe factory by Jonathan Orne. The factory of Jacob H. Cropley & Bro., on Essex street, Peache's shoe factory and the houses of Dennis and Jacob Pine were reduced to smouldering ruins. On Spring street the fire swept on, destroying the residence and a factory of William C. Lefavre. Its progress was checked at the Sewell Grammar School building. Sweeping across Spring street, the flames con-sumed the handsome dwelling of Dr. Whittemore. Here the flames changed their course, and, sweeping on to Sewell street, completely destroyed everything in the rear of Pleasant street, taking everything clean up on both sides of the railroad track. The residences of Mr. Chamberlin and the late Thomas F. Crossman, Paine's livery stables, Thomas Rixls fruit stand and numerous small buildings were burned to the ground. At 3 o'clock the fire was under control, though yet burning fircely. This stolid old burgh, in June, 1877, was visited by a fire which swept over nearly the same district. Durin the progress of the present fire several explosions were heard. Fully 1000 workmen are thrown out of employment. The losts is estimated at \$560,000.

A RIVER BOAT BURNED

THE JOHN H. HANNA DESTROYED ON THE MISSISSIPPI-THIRTY PERISH.

PLAQUEMINE, LA., Dec. 25.—The burning of the steamboat John W. Hanna, last night near Plaquemine, was one of the most terrible river disasters that has ever happened in South-

ern waters. The loss of life was heavy, nearly 30 persons perishing in the flames and in the river. At the time the fire was discovered the crew were at their posts. Captain Jolles was at the wheel, and in the pilot house with him was Bob Smith, a famous Mississippi river pilot, who was one of the men on the Robert E. Lee when she burned to the

water's edge, some years ago. LATER.—A Plaquemine aces the number known to be lost by the Hanna disaster as five whites and

ST. LOUIS, Dec. 25 .- The Republic's New Orleans special gives additional interviews with survivors of the steamboat Hanna. Dan Carroll, the steward, says: "The first indication I had of the fire was when I was awakened by Lew Rawlings. I immediately jumped on the roof from my room and there found the fire so told her that he only wanted one oil strong it knocked me down

unable to rise, I rolled over the best way I could and fell into the river, and

then swam 200 yards." Mr. Carroll is badly burned. He was taken to the hospital. Mr. Carroll says that the last lady passengers that were on the boat coming down likely got off at Baton Rouge. The passen-gers that were aboard at the time of the accident were Captain P. G. Montgomery and Mr. Harpin, of the Board of Underwriters, a drover and his son,

who were saved. Mr. J. W. Hanley, chief engineer of the boat, arrived at the office of the company owning the boat this morning. His face is badly burned. He says that the fire started in the cotton just aft the boiler a little before 12 o'clock last night. The second engineer was on watch, and immediately blew an alarm, but so fast did the flames spread that in three minutes the boat was ablaze from stern to stem. He jumped overboad on the shore side and reached the bank, and turning around saw Captain Holmes struggling in the water and made every effort to

rescue him. Captain Holmes, Chief Clerk Samuel Powell, Carpenter John Croften and Robert Smith, steersman of the crew, are known to be lost, James Given, sailor; James O'Neill, deck hand, and Dan Carroll, steward, are very badly burned.

Mr. Hanley further said: "I think that from the crew of the Hanna and that of the Josie W., who were passengers, the loss of lives is from 20 to 25. The bcat, when burned, was lying at the bank at Plaquemine, and the people of that town treated us with great kindness and furnished us liberally with food and clothing."

THE TROUBLE AT LAMAR, MISS.

LAMAR, Miss., Dec. 27th .- The reports of race trouble in this village have been greatly exaggerated. There has been considerable excitement here, but, barring one knock down, no one has been injured. Yesterday a drunken negro insulted a white man, and was promptly knocked down and severely punished.

Other negroes in the town became demonstrative, and several whites becoming alarmed telegraphed to Memphis for Winchester rides. The report that trouble was expected here was circulated in neighboring towns, and white men began flocking into Lamar until the little village looked like an armed camp.

If the negroes meditated an attack on the whites the show of force awed them, and they made no demonstration. There was great excitement here all day, but things have now quieted down, and the armed men are leaving town by every train.

FOUR MEN KILLED BY A CAVE-IN-

DENVER, Col., Dec. 26.-A fatal accident occurred his afternoon on Fifteenth street, between Tremont and Court place, which resulted in the fell upon the men underneath. The dead and two badly wounded have been removed. The other men escaped, with more or less bruises. The dead are: William Katri, aged

50, married, large family. N. M. Wilson, married, large family. Joseph Trainers, leaves a widow. Mike Dillon, a single man, about 40

vears old. James McKuen was badly crushed and cannot recover. The excavation was being made for the purpose of removing a gas pipe from underneath the track, and the accident is believed to be due to carelessness upon the part of the gas company in neglecting to place proper supports under the track where the

RAVAGES OF DIPHTHERIA.

men were at work.

ALLENTOWN, Dec. 27 .- The diphtheria scourge in the western portion of the county continues unabated, the warm weather of the past few days seeming to add to its virulence. At the village of Breiningsville the malady is very severe, and nearly every family is afflicted. A case of extreme sadness is that of Henry Young, whose family has been almost wiped out by the disease. Last Saturday morning he buried in one grave three little sons, aged 6 and 8 years, who had died within thirty-six hours of each other. Yesterday morning he lost another son, 13 years old, who was followed in the afternoon by another son 16 years old. It is a singular fact that, of his six sons and two daughters, all of whom are sick, the mortality is confined to the former. Daniel Newmeyer, also a resident of Breinigsville, lost two children within a few hours of each other, a giri of 11 last night, and a boy of 7 this morning. Dr. E. M. Mohr, of Alburtis, this morning, buried in one grave his two children, two girls, aged 4 and 5 years, who both died of diphtheria on Monday. At Alburtis, the disease is still prevalent, and during the last two weeks the death roll numbers about 15. Usually the cases are of short duration, the poison quickly permeating the systems of the little ones and causing death. In this city there have recently been only a few cases of diphtheria, and the general health of the place is excellent.

AN IMPASSIBLE BARRIER,-Editor What is that you're writing up?

Reporter-A wedding. "Well, be sure and ring in something about the bride's beautiful flowing bair setting off the dazzing whiteness of her complexion, and all that sert of thing. Make friends wherever you can you know."

"I cant ring that in this time."

"The parties are colored."

Being more to make him a perfect fish

A TERRIBLE DISASTER.

ON THE MISSISSIPPI.

POSSIBLY 35 TO 50 LIVES LOST. MEMPHIS, Tenn., Dec. 23 .- The elegant passenger steamer Kate Adams, running as a semi-weekly packet between Memphis and Arkansas City, was burned this morning near Comthis city. She was en route to Memphis, and had about two hundred deck pessengers, and 25 colored cabin

The fire, which caught in some cotton near the forward end of the boat, was time the steamer was about 300 yards from the Mississippi side of the river, and her bow was at once headed for the shore. Pilot J. A. Barton was on watch, and he remained heroically at his post until she was safely landed. Harry Best, the second clerk, who was seated at the table when the alarm was children forward and assisted them ashore.

There were about 25 colored cabin passengers who were saved along with the white passengers. On the lower deck, however, a fearful panic selzed the crew and deck passengers. Those who were cut off from escape from the bow were compelled to jump overboard to save their lives. The stern of the burning steamer had swung out into the river, and an effort was made to mostly colored men, but there were three or four women in the crowd. THE LOST.

The lost, as far as can be learned, are as follows: George Corbet, third clerk, aged 39 years, who had launched the yawl, and was trying to save the colored women on the lower deck. He leaves a wife, who resides in St. Louis, Joe Porter, Andrew Rees, Monroe Jackson, Jim Nelson, Senator Coleman and Hilliard Horton, of the colored cabin crew. Lee Finley, Frank Wells, colored roustabouts. In addition, about fifteen deck passengers, four of whom were white men, were also drowned. In this list of unknown were three colored women and two children. They were coming to Memphis to spend the holidays. The whites had been working on the levees, and their namas and destination are un-

The burning steamer drifted away, after lying at the bank for 20 minutes, and floated down the river, her hull sinking at the head of Peter's Island. four miles below Commerce.

NEWS OF THE WEEK.

-Andrew Ziega, his sister Kate, George Stump and wife, Matthew Cox and Mary Morales were drowned on the afternoon of the 25th while sailing in San Francisco Bay. A sudden gust of wind upset the boat. They all resided men were immediately set to work in San Francisco except Miss Morales, removing the fallen track, and four whose home was in Pasadena. Two young women were drowned at Hillsville, near East Brady, Pennsylvania, on the 25th. They in company with another girl and two young men, were crossing the Allegheny river in a skiff. when it sank with them. The rest of the party were rescued in an exhausted condition.

-On a Denver and Rio Grande freight train, at Cuchua, Colorado, on the morning of the 22d, William E. Comstock, conductor, and Henry Borst, brakeman, were killed in a singular manner. Both men were turning the brake when the wheel gave way. Borst was run over by the train and instantly killed; Comstock's skull was fractured, and he died in a few min-

-Ernest Kurtz and his 15-year-old son were found dead in the woods near Jacksonport, Wisconsin, on the 21st. They had gone out early to cut cord

cutting down and killed both. -William Crossley shot and killed his wife in Syracuse, New York, on the evening of the 23d, and then committed suicide. They had lived apart for six months of their year of married

-Henry D. Schoonmaker, a young salesman, shot and fatally wounded his wife and then killed himself, in Brooklyn, on the evening of the 22d. He was 23 years of age, she 22, and they had a 14-months-old baby that was away from home at the time. It is supposed Schoonmaker was insane.

-Fount Horner, aged 20, being crazed by drink, seized a club and ran amuck through the streets of Wheeling, West Virginia, on the 25th. He knocked down and severely wounded several people. The last man he struck, Edward Aimes, drew a knife and killed his assailant. Aimes was George Kunie was stabbed to death by George Fori in a quarrel over the division of a piece of meat in Greenevening of the 24th, between Gullidge, about a woman.

-The latest advices from Wahalak, Mississippi, the scene of the late race troubles, are to the effect that three negroes have been captured, but their names have been withheld. From the prisoners just taken it is learned that George Maury, Cash Maury and George Coleman were wounded in the fight of December 16. Walter Crook, the most intelligent of the fugitives, is supposed to be in hiding at the residence of a white man, and a search warrant has been secured to ransack the place. The wounded men are

-The steamer Leif Ericksen was burned to the water's edge near Seattle,

board at the time and seven are missing. One theory of the origin of the THE STEAMER KATE ADAMS BURNED exploded and set fire to the boat, and another that a demijohn of whisky in the pilot house was broken, and the whisky, running through to the boiler,

was ignited. -A private telegram was received in Memphis on the evening of the 26th reporting a negro riot in progress at Laman, Mississippi, and asking that some Winchester rifles be sent on the merce, Mississippi, 40 miles south of first train. It was rumored that two whites and five negroes had been killed. Laman is 12 miles south of Grand people aboard, including her deck and deck and cabin crew of 80, and 25 cabin and 60 the Illinois Central Railroad.

-A heavy storm of sleet and wet snow prevailed on the 26th throughout Iowa, Northwestern Missouri and part of Kansas. The storm was accompadiscovered about 8 o'clock. The pas- nied at Cedar Rapids by a high wind. sengers were at breakfast, and when the alarm was given they all made a rush for the forward deck. At the given by the Signal Service at Chicago on the evening of the 26th of a prospective fall of 15 to 20 degrees in temperature before morning.

-During a Christmas entertainment at East Prospect, in York county, Pennsylvania, on the evening of the 25th, the building collapsed, and three given, had brought all the ladies and hundred persons fell from the second to the first floor. The stove set fire to the ruins, adding to the terror of the situation, but the victims were speedily released. A large number were badly bruised and cut, but none fatally injured. The most seriously injured were Miss Beckie Burg, leg broken in two places; Mrs. Valentine Knisely, leg broken; Miss Flora Wallace, leg broken; John Hines, seriously burned.

-An explosion occurred in the Ammonia Works in Toronto, Canada, launch the yawl. It was capsized by on the 25th, wrecking the building, the crowd which filled it, and many of killing David Sexton and injuring its occupants drowned. They were several others. The foreman of the works is missing and supposed to be in the ruins. A freight train on the Midland Railroad jumped the track at Line Creek, 20 miles from Leadville, Colorado, on the 26th, and T. Harlan and Robert Martin, train hands, were killed.

-William Thompson, aged 19 years, was attacked by several young men at Upper Black's Eddy, Bucks county, Penna, en Christmas night, while escorting a young lady home from church. He drew a revolver and fired several shots without effect. Aaron Wismer, one of his friends, then went behind him and tried to disarm him, but Thompson, not knowing who it was, fired over his shoulder, the ball taking effect in Wismer's breast and indicting a fatal wound. At Raywick, Kentucky, on Christmas, John Abrey attempted to cut T. K. Carter's throat, and succeeded in inflicting an ugly wound. W. Parker Fleece took up the difficulty in Carter's favor and armed himself with a shotgun, which renewed the trouble. Mrs. W. P. Fleece attempted to act as mediator, when the discharge from her husband's gun struck her in the breast and wounded her fatally.

of Wolcott, New York, cut his wife's throat on the 27th and then cut his own. They will both die. Domestic trouble was the cause. A man named Swan, a worthless character, shot and near Akron, Iowa, on the 26th, without having a party, was blown up by dynamite on the evening of the 26th. Several of the inmates are reported to have been fatally injured.

-The capacity of the shoe factories burned in Marblehead, Massachusetts, when running on full time, was 250 cases per day, and the pay roll was about \$21,000 a week. A telegram from Marblehead says: "To-day with sixth can find employment. Aid is dead." needed, and must be forthcoming or great suffering will ensue."

notified on the 27th, that the post-office at Argos, Indiana, was robted on the evening of the 23d, of the money order fund. The amount is not stated. There is no clue to the robbers, The limb fell from a tree which they were robbed on the evening of the 27th. Northumberland was also entered and 24 cents secured.

> -A sleet and snow storm in Kansas City, Missouri, on the 27th, caused considerable damage to the wires of the electric light and telephone companies. The wires in many parts of the city were down and the poles breken.— Snow fell in Iowa, Wisconsin and Da-kota on the 26th. Railroads in the vicinity of Waverly, Iowa, were badly blocked, but trains were running.

> -White Caps in Hopedale. Ohio, gave Dr. John Parkhill, a leading physician, a terrible trashing on Christmas night. His errand boy had been intoxicated and the White Caps accused Parkbill

of drugging him. -Michael O'Gara, aged 13 years, killed his 11-year-old brother, while ment in Washington, fell over the was a European invention, balusters on the fourth floor of the aged 35 years, and M. E. Edwards, building on the 27th, and was killed. 1745, but it is still performed in France aged nearly 70, in which the latter was about 80 feet. Keating and some of the German states, in the was intoxicated at the time.

-A passenger train on the Montana Central Railroad was derailed on the morning of the 27th by an open switch. A fireman named Morse was killed, and one passenger was injured. The snapping of its rod by frost caused the switch to open. A coal train ran into a passenger train on the Pine Creek Rathroad, near Williamsport, Penna. on the morning of the 27th. The engine and several cars were wrecked and burned, and two men were

Mr. W. H. Preece, while praising the light obtained from electricity in a ecture delivered in London the other evening, strongly comdemned electric Washington Territory, on the evening lighting company mongering and elec-of the 24th. There were 33 persons on tric lighting finance.

DEATH PENALTIES.

Capital Punishment in Olden Times,

The term "capital punishment," meaning a fatal operation upon that most vital part of the human frame, the head, is now no misnomer, but the time was when the death penalty was by no means directed at the head alone. Death by stoning was, in all probability, the earliest method of punishing crimes, the Jews and other oriental nations being especially given to this form of supreme penalty. From the extremely comprehensive code of capital offenses which appeared in the Mosaic code, it is to be concluded that a death by stoning was a very common occurrence, and that the "young men of the congregation" to whom were intrusted the duties of executioner, must have be-come quite expert in their office. It is quite possible, however, that personal cited. For example, in seeking retaliation antedated punishment by for the cause of any case or retaliation antedated punishment by the community, and that the eye of eye, tooth for tooth and life for life doctrine was rigorously carried out. For the instantaneous dispatch of an offender the Jews used the swords, but stoning continued to be the set form of capital punishment up to the time of the Christian era. Then crucifixion took its place, a form of death penalty borrowed from the Latin conquerors. According to tradition, however, the

Assyrians were the inventors of this particularly unpleasant form of being kept in suspense, and it is a woman, Semiramis, who has the doubtful honor of being the first to employ it. The ordinary method of inflicting it was by nailing the victim to a cross, where he was left until dead. Occasionally, however, a cheerful innovation was introduced by setting the cross on fire before the victim's death, or by letting wild beasts devour him in his defenseless position. Both the torch and the jaws of the wild beasts' fangs were really merciful reliefs, for cases are on record in which the victim lingered in agony for eighteen and twenty days. Death by crucifixion was inflicted on women as well as on men, and such un- | Flint; speakable atrocities were practiced under the guise of just punishment that the cross was abolished by Constantine the Great about A. D. 315.

DIFFERENT ROMAN METHODS. Though the Romans were greatly given to crucifying, it can scarcely be said that they had any one national form of capital punishment. They acted largely after the mikado's plan of letting the punishment fit the crime. Christians were burned, torn to pieces by beasts, drowned in quagmires and rivers and vivisected. Political offenders, on the other hand, were thrown from the Tarpelan rock. This was a lofty and precipitous promontory on one side of the Capitolines hill. Runaway slaves when recaptured were turned adrift into the deserts or woods overrun by wild animals, or else bound to a rock and left to starve. It was customary for a while in Rome to permit capital offenders to select the manner by which they would meet death and be allowed to inflict the penalty upon themselves. This custom also obtain--James Green, a prominent citizen ed in Greece, and when Socrates was quarter of centuary ago as the wildest condemned to death for spreading dis- and most impossible speculation." belief in the national religion he chose

to die by drinking hemlock. One of the most cruel and unusual of punishments was that which the Rokilled Wm. Myers, a young man living mans in the latter days of the republic meted out to those who murdered either a cause. A house in the eastern part of their parents. Luke Owen Pike, M. of Rockingham county, Virginia, in A., author of the "History of Crime in which a number of colored people were | England," in referring to this punishment, says:

"Not in the amphitheatre, not at the stake, not on the cross was the parricide to perish. A sack was to be his winding sheet; in that he was to be sewn up alive and venomous serpents with him. He was to be thrown into the sea, if the sea was near at hand, and if not, into a river, so that the heavens might be hidden from him while still alive, a population of 7500 only about one- and the earth deny him a grave when

Often, however, in addition to the vipers, there were a dog, a monkey and a rooster sewed up in the sack with the -Post-office Inspector Kidder was victim, who was naked. The sack was

usually of leather. The oriental nations have always been remarkable for the ingenious such prominence: cruelty of their death punishments, although it is doubtful whether they wood, and the supposition is that a post-office at Sunbury, Penna, was have been more cruel than the self styled highly civilized nations of the west, The thieves got 76 cents. The office at | Death has come from slow strangulawas poured on the joints after they were dislocated; by mechanical means, as in France and Germany, from flaying, or stripping the skin off the body, as was formerly done in England, and

land at one time.

CRUELTY AIDED BY INGENUITY. Every method which human crueity could prompt and human ingenuity devise has been resorted to at one time or other in ancient or mediæval days, and among nations professing to be civiliz- patient? This is the question. ed, to administer torture and death, It is true that Japanese offenders have been as great in surgical as in medical been executed by the slow passage of a practice, owing to the use of antiseptic hunting near Flemingsburg, Kentucky, spear upward through their entrails, methods in operation—methods de-on the 26th. In attempting to shoot a and that the Chinese criminals have veloped from those of Lister—and to arrested, but afterwards discharged. on the 26th. In attempting to shoot a and that the Chinese criminals have rabbit Michael tripped and fell, the been gradually beheaded with a bam- this Dr. Flint directs attention. In contents of both barrels being lodged boo saw, but at the same time that conclusion he says: "If what is known in his brother's head. Michael Keat- most barbarous form of inflicting the of the relations of bacteria to disease burg, Penna., on the 25th. A fight ting, a messenger in the War Depart- death penalty, the boiling in a caldron, can justify even a small part of the took place in Carnie, Illinois, on the ment in Washington, fell over the was a European invention.

> sword is also a capital punishment in illimitable,' China. The two handed sword was in use in France before the guillotine was introduced, while for great crimes the like this, written by men emminent in victim was broken on the wheel. It appears to have come first into use in the results of researches so important, Germany, where it was employed as when the causes of many preventable early as the Tenth century. Francis I, diseases shall have been clearly and revolves the limbs of the vict in were ties.

fractured by heavy blows from a heavy iron rod delivered below the knees and elbows. Sametimes the rod was held in position mechanically, the limbs of the prisoner, as he whirled on the wheel, coming in contact with it. Usually, however, the rod was held in the hands of an executioner, who administered the blows as rapidly as he could wield it. In France the torture of this mode of punishment was lessened in many cases by heavy blows being dealt on the head and chest of the victim, so as to shorten life. These blows were called coups de grace or strokes of Mercy.

The Microbe and its Work.

Remarkable progress in the study of the causes of what are commonly called the preventable diseases has been made in the last ten years. In so wide a field almost innumerable proof could be for the cause of group of cases of typhoid fever attention is at once directed in thesedaysot the condition of the water or the milk that had been consumed by the patient previous to their illness. In all probability a majority of the cases of typhoid in this city and Brooklyn at this time were caused by the use of contaminated water or milk while the persons now ill were in the country. The cause of the first case in the great epidemic at Plymouth, Penna., was the contamination of the town's water supply. The researches of Power and Klien in London with respect to the causes of scarlet fever and the communication of this disease from animals to man, the discoveries of Koch and Pasteur, the reports of health officers, and many of the methods of modern sanitation, all serve to call to mind the advances recently made in the scientific

war against disease. The "Forum" for December contains a very interesting article by Dr Austin Flint, of New York, concerning recent discoveries in bacteriology and the effect of these discoveries on medical and surgical practice. Says Dr.

"The science and practice of medicine and surgery are undergoing a revolution of such magnitude and importance that its limits can hardly be conceived. Looking into the future in the light of recent discoveries, it does not seem impossible that a time may come when the cause of every infectious disease will be known; when all such disease will be preventable or easily curable; when protection can be afforded against all diseases, such as scarlet fever, measles, yellow fever, whooping cough,&c., in which one attack secures immunity from subsequent contagion; when, in short, no constitutional disease will be incurable and such scourges as epidemics will be unknown, These results, indeed, may be but a small part of what will follow discoveries in bacteriology. The higher the plans of actual knowledge the more extended is the horizon. What has been accomplished within the past ten years as regards knowledge or the causes, prevention and treatment of diseases far transcends what would have been regarded a

There follows this significant declaration a description of the methods by which the disease-producing organism called microbes or bacteria have been discovered and brought under observation, with some reference to the actual production of diseases by innoculation with pure cultures of the characteristic microbes: "in certain diseases," says Dr. Flint, "among which are tuberculosis, pneumonia' erysipelas, carbuncle, diptheria, typhoid fever, yellow fever, relapsing fever, the malarial fever, certain catarrhs, tetanus, nearly all contagious diseases, a great number of skin affections, &c., the causative action of bacteria can no lenger be doubted. The conditions necessary to the development of these diseases seem to be a suscectibility on the part of the individual and the lodgment and multiplication of special bacteria in the system." The following statement concerning the disease that causes perhaps one-seventh of the deaths of human beings is notable, coming, as it does, from a physican of

"It is probable that a person with an inherited tendency to consumption would never develop the disease if he could be absolutely protected against infection with the tubercle bacillus; tion from a rope, as was in vogue in but once infected, the bacteria multiply China, for instance, and at the same and produce the characteristic signs time from the use of boiling oil, which and symptons. In other persons the bacillus tuberculosis with difficulty finds a lodgment and multiplies imperfectly. Many of the lower animals are suceptable to tuberculosis, and the disease has often been produced by from pressure between planks, on the direct innoculation with a pure culture upper of which great weights were of the tubercle bacillus. In the light laced, as was also in vogue in Eng- of modern discoveries consumption can no longer be regarded as an incurable disease."

Can the bacteria or their poisonous -the "ptomaines" that are supposed to be the direct cause of the disease -be destroyed without destroying the effect of disoveries in bacteriolgy has conclusion he says: "If what is known speculations with regard to the possible Decapitation ceased in England in results of future investigations, our first country by the guillotine and in growth of plants, to the changes of the second by the sword, the instru- matter involved in putrefaction, and to ment employed in England having been all kinds of fermentation, opens a field the broad ax. Decapitation with the for the imagination that seems truly

There is instruction of the most valuable kind for the public in articles

about 1525, introduced it into France. authoratively pointed out, it will be It was employed for a time also in comparatively easy for many persons England. The prisoner designed for to avoid them or to defend themselves death by this method was bound to an against them either by their own instrument rudely resembling a wheel, action or by the agency of health his legs and arms being separated as far | boards. The clear presentation of the as possible and attached to crossbars facts is of great value for the enlight-corresponding to spokes. As the wheel ment and guidance of health authori-