SCIENTIFIC AND INDUSTRIAL.

Applying certain measurements to a scarcely visible film of silver, Hern Wiener arrives at the conclusion that no less than 125,000,000 molecules of silver must be laid in line to measure an inch.

In a collection of poisonous fishes now on exhibition at Havre is a very pecu-liar. Tetrodon from the Japan Sca, which is sometimes used a means of suicide. It gives sensations like those of morphis, then death.

then death. Though discovered in 1879, saccha-rine is just beginning to be manufac-tured on a large scale, near Magdeburg, Prussia. Having 300 times the sweet-ening power of cane sugar, this remarka-ble product is adapted to many uses. It is expected to be especially valuable in medicine on account of its absolute barmlessness.

harmlessness. In addition to supplying crops with necessary moisture, rain has a distinct manurial value. At Rothamstead, the well-known farm of Sir John B. Lawer, it has been shown that, with an annual rainfall of a little less than 33 inches, each acre of land receives every year in the rain water over 14 pounds of pure chlorine, and between two and three pounds of ammonia.

pounds of ammonia. An English inventor proposes to im prove, by condensation and hardening-ine partels of small arms, tunes and the like in their finished state; this to be ac-complished by subjecting them to a pres-sure of 500 or more tons while they are immersed in water in a strong vessel, the operation being performed by hydraulic pressure caused by a heavy hammer fall-ing on a piston which closes said vessel. Artificial refrigeration is proving of great economic value. Besides its appli-cation to the manufacture of ice in warm countries, the principle is well adapted

cation to the manufacture of ice in warm countries, the principle is well adapted to the cooling of air, and rooms are fit-ted up with coils of pipe by which any desired temperature can be continuously kept up, either just above the freezing point or many degrees below it. Ocean steamers are now supplied with this ap-paratus, and the temperature of the hold is kept so low that fresh meat and pro-visions can be transported for the longest voyages without injury. The coulibrium of the air is frequently

The equilibrium of the air is frequently such that the under surface of the clouds is like a ceiling. It is a fair weather sign, whether upon the sea or upon the land. One may frequently see it in sign, whether upon the sea or upon the land. One may frequently see it in a mountainous district, when the fog-clouds settle down, and blot out all the tops of the mountains without one fleck of vapor going below a given line which runs above every valley as uniform as the sea level. It is probable that in fair weather the atmosphere always lies in regular strata in this way, and that it is the displacement and mixing up of these by some unknown cause that produces storms. storms.

storms. The economy of superseding horses by electricity on street railways is still some-hikely to remain so long. Much that has been claimed in this direction, says an ikely to remain so long. Much that has been claimed in this direction, says an or hikely to remain so long. Much that has been claimed in this direction, says an or hikely to remain so long. Much that has been claimed in this direction, says an or how for the storage battery system not more than forty per cent. of the power collected from the steam engine and applied to the dynamo can be recov-ered in work. But this, he says, makes the storage system cheaper than horse the storage system cheaper than horse of the so-called storage battery. It is there are those who believe that the present compares with that of the future sourcely more favorably than did Watt's were later.

Tortugas Island,

mander Ullmann, a retired officer Commauder Ullmann, a retired officer of the Hungarian army, who is now trav-eling in this country, is the owner of the Tortugas Island, about which the Hay-tian and British Governments had quite a controversy some time ago. Tortugas Island is considered valuable for a naval station, as it has the best advantages for the large ships of war and several natu-ral harbors. Great Britain, it was said, wanted the island for this purpose, and the United States were also interested in it for this reason. The British Govern-ment threatened to seize the island on ac-count of a claim of \$1,000,000, but this was settled by the payment of \$160,000. The Haytian Government owned the island, and was in need of funds. When The Haytian Government owned the island, and was in need 2f funds. When they were pressed for the claim they speedily raised the money in Paris, and the next thing we hear is that the island was purchased by Commander Ullmann. He regards his purchase as a valuable one, as it commands an easy mode of travel to the Panama Canal. The new owner of the island is anxious for the United States to assume the dominion of the island. He has offered the island to this fsuzarament of one years. The fangenment, he has oriered the island to this fangenment on very easy terms. The tracts of timber land. It will be a valu-able purchase if the United States Gov-ernment buys it.—Demorest.

RELIGIOUS READING.

Asking

Asking. "If ye then, being evil, know how to give good gifts to your children; how much more shall your Heavenly Father give the Holy Spirit to them that ask Him?"-St. Luke Xi., 13.

"O Heavenly Father, Thou hast told Of a gift more precions than pearls and gold; A gift that is free to every one, Through Jesus Christi, Thy only Son; For His sake give it to me.

"O give it to me, for Jesus said, That a father giveth his children bread, And how much more Thou wilt surely give The gift by which the dead shall live? For Christ's sake, give it to me.

"I cannot see, and I want the sight; I am in the dark and I want the light; I want to pray, and I don't know how; O give me Thy Holy Spirit now! For Christ's sake, give it to me.

"Thon hast said it, I must believe. It is only 'ask' and I shall receive; If Thou didst say it, it must be true, And there's nothing else for me to dol For Christ's sake,give it to me.

--Inits F. R. Havergat. Fifty Years Ago. Half a century ago seven humble shoe-makers in a shop in Hamburg undertook the work of evangelization on the principle of individual responsibility. In twenty years they had organized fifty churches, gathered ten thousand converts, distributed four hum-dred thousand Bibles and eight million pages of tracis, and preached the Gospel to fifty millions of people. As they went from place to place, the work grew, and new con-verts, inspired with similar zeal, became helpers; so that a population as great as that of the United States, or of the Congo Free State, heard the Gospel within those twenty years. If any are distrustful of mero arith-metic as applied to the problem of missions, here is a practical proof that it is perfectly easible so to organize the work as to reach a hundred millions of people every year, and that, too, with only an insignificant Gideon's band.--Rev. A. T. Pierson, D. D.

From Africa to Glory.

From Africa to Glory. Mrs. De Heer, writing of the (for the present disbanded) Benita School, says: Kearly all the girls we dismissed had re-position they will be called to occupy. Since our church have been called to occupy. Since our church have been called to the church above; all died in the faith, and some of the faith, and so

To the Christian Public.

To the Christian Public. Thoughtful men are convinced that the closing years of the 19th century constitute a momentous crisis in the history of the nation. There is a march of events which will not tarry. The necessity of planting Christian institutions in the formative west, and of strengthening them in the older states, the duty of overtaking the rapid growth of our cities with adequate church provision, the importance of closing the widening chasm between the edurch and the multitude, and of bringing the regenerative Power of the Gospel to bear upon every character and life, demand the instant attention of the Christian church and the full exercise of all its ener-

demand the instant attention of the Christian church and the full exercise of all its ener-gies. Popular education has multiplied wants and created tastes which wealth has not been sufficiently distributed to gratify; hence a growing discontent anong workingmen, which in prosperous times is an ill omen, sug-gesting grave questions concerning the next financial panic and the consequent industrial depression. The confict with the saloon drawing to a crisis, and the manifest deter-mination of the liquor power to accomplish its ends by fraud, corruption, or violence; a wide-spread spirit of havlessness; the apathy of the popular conscience; the alienation of the masses from the churches, and increasing immigration—all these point to growing com-plications in the near future. Under monarchial governments, men have thought that if power could be popularized the ills of life would mostly disappear. In this country, until recently, by reason of abundant public lands, a sparse and sub-stantially homogeneous population and an almost limitless demand for labor, we have been exempt from many of the evils stiffered by European peoples. But we are now be-gimning to approximate European conditions of society. The existence of great cities, increasing pauperism and crime, are the oc-casion and evidence of a widespread discon-tent, for which the ballot affords no remedy. Has not the time come for us to make dem-onstration of the truth that the Gospical casion and evidence of a widespread discon-tent, for which the ballot affords no remedy. Has not the time come for us to make dem-onstration of the truth that the Gospel can do what popular suffrage cannot do? Is not must ne nation, and is not this the generation providentially called to make such applica-tion of the Gospel to the life of the people as has never 'yet been made' Will not those who have enjoyed 'government of the people by the people, and for the people' be the first to learn that the essential evils of society are caused not by misrule, but by sin, and that the Gospel, therefore, must furnish the solu-tion of the great social problem? The Christian Church has not yet fully recognized its relations to the entire life of Christian men, preoccupied with private con-cerns and overburdened by the domands on their time, are prone to neglect the public welfare, and are loath to accept any respon-sibility for existing evils. Denominations and local churches, each in-tend on its own good work, have fallen into a harmful competition instead of engaging in an intelligent and comprohensive co-opera-tion.

One of Rum's Victims

TEMPERANCE.

Cast Them Out.

* * * * * * * The demon drink that stains the skin, The evil spirits kept within, Blot out the glory of the face. Let all who love what's just and right Cast out these devils, black and white, And help to save a suffering race.

Why Neal Dow Hates Rum.

.

One of Rum's Victime. With wet bedraggied clothes, covered with Nolan, wife of a hard-working cloth cuttor, fourt this morning. The woman lived with her husband, at 353 Hardson street, but her fore for rum caused her to neglect her home and fall into the hands of the police. Last in the state of the police of the police of the poper saw her go from one saloon to air other, and when she came out with her baby and the she ungit kill the child and so ar-rested her and locked her up. In Court of ent Stocking recognized her as an old offender. She had a soda water bottle full of mer blocking recognized her as an old offender. She had a soda water bottle full of mer afreedy in city institutions, being paid of by the husband. Ehe has been four times patherson sent her for another term of six paths for the baby's sake. – New York Brandy and whisky, rum and gin, And wine and beer received within, Are evil spirits out of place. Heaven grant to all she will and might To cast out devils, black and white, And drown them in the occan's space. George W. Bungay, in National Advocate. The numerical product of the prod

How a Young Man May Be a Nobody. It is easy to be a nobody, and we will tell you how to do it. Go to the drinking-saloon to spend your leisure time. You need not drink much now; just a little beer or some other drink. In the meantime play domi-nees, checkers, or something else to kill time, so that you will be sure not to read any use-ful books. If yon read anything, let it be the dime novel of the day; thus go on keeping your stomach full and your head empty, and yourself playing time-killing games, and in a few years you will be nobody, unless you should turn out a drunkard or a professional gambler, either of which is worse than no-body. There are a number of young meir hanging about saloons just ready to graduate and be nobodies.—*Watehmen*. How a Young Man May Be a Nobody.

"I Don't Want Relief, But Cure."

is the exclanation of theusands suffering from catarrh. To all such we say: Catarrh can be cured by Dr. Sage's Catarrh Rémeyd. It has been done in thousands of cases; why not in yours? Your danger is in delay. En-close a stamp to World's Dispensary Medical Association, Buffalo, N. Y., for pamphlet on this disease.

A Jackson, Mich., manufacturer is shipping wagons to Australia.

An Important Arrest.

An Important Arrest. The arrest of a suspicious character upon his general appearance, movements or com-panionship, without waiting until he has rob-bet a traveler, fired a bouse, or murdered a fellowman, is an important function of a shrewd detective. Even m re important is the arrest of a disease, which, if not checked, will blight and destroy a human life. The frequent cough, loss of appetite, general lan guor or debility, pallid skin, and bodily aches and pains, announce the approach of pulmo-mary consumption, which is promptly arrest ed and permanently cured by -Dr. Pierce's "Golden Medical Discovery." Sold by drug-gists.

What do we live for if it is not to make life less difficult to each other

Weak lungs, spitting of blood, consurp-tion and kindred affections, cured with ut physician. Address for treatise, with 10 cents in stamps, world's Dispensary Medical Association, 663, Main Street, Buffalo, N. Y.

A railing woman is like a swordfish. She carries a weapon in her mouth.

Offer No. 170.

FREE!-TO MERCHANTS ONLY: A three-foot, French glass, oval-front Show Case. Address at once, R. W. TANSILL & Co., 55 State St., Chicago.

1. A. SLOCUAI, M. C., 181 Pearl St., N. Y. Consumption, Scrofuln, General Debitity, Wasting Diseases of Children, Chronic Coughs and Bronchitis, can be cured by the use of Scorr's EMULSION of Pure Cod Liver Oil with Hepophesphites. Prominent physicians use it and testify to itsgreat value. Please read the following: "I used Scoit's Emulsion for an obstinate Cough with Hemor-rhage, Loss of Appetite, Emaciation, seep-lessness, &c. All of these have now left, and 1 believe your Emulsion has saved a case of well-developed Consumption."-T.J.FINDLEY, M. D., Lone Star, Texas.

DISCOVERY.

MARVELOUS

lal system Whelly unlike artificia Any book learned in or Wholly u Restored to its right us, the Microscope and II. The Nat Scientific extension of the Na Scientifically trained Memoria elescope construction is the ral Eyesight, so is the ral Eyesight of the 7

r of Co

e gave me a new memory"-Hon nin---"It has greatly strengthened nory"-Hon. W. W. Astor, late U. S ---"Prof. Loisette's system appears

shorthand, but to the veteran reporter"--W. W. Wil-son, Stenographer. "Since learning your System, I find I can soon learn to play any piece of music without notes, a fead im-possible to me formerly"-Thins is method will not creatly aid if nor has any one a memory so good as not to stand in need of the help which if can fur-ish"--Frof. Wm. R. Harsy one a memory so good as not to stand in need of the help which if can fur-ish"--Frof. Wm. R. Harsy one a memory so good as not to stand in meed of the help which if can fur-ish"--Frof. Wm. R. Harsy nee a memory so good as not to stand in meed of the help which if can fur-ish"--Frof. Wm. R. Harsy needs the the set of the network of the set of the help which if the set of their memory and cure their mind windering"-Bernard Ellis, Esg., ----'I to is a perfect memory sys-tem"--Weedle Budget----'I do not say that I made uyself a walking Hume or Macnilay, but I do 'then is to your system. The result was foll marks (120"-Reginald E. Nurray, Esg., ---'' have just come cost in great measure to the general Improvement which your system had effected In more redifferences and on in the --publy recommending the system to all who are in carneds in wishing to train their memooff top in a Bursary examination, and Low my suc-cess in great measure to the general importements into an intervent.² Thomas Tati, Eag. — "I have no hesi-iation in theroughly recommending the system to all who are in earnest in wishing to train their memo-ries effectively, and are therefore willing to take ree-sonable pains to obtain so useful a result.² Mr. Rich-end A. Procisor, the Astronomer.— "Trof. Lolsette dil not create a memory for me, no, nothing or the endities of the system to the system to all who are in earnest in wishing to train their memo-ies effectively, and are therefore willing to take ree-sonable pains to obtain so useful a result.² Mr. Rich-et al. 2019 (1998) (1998) (1998) (1998) (1998) (1998) (1998) et al. 1998) (1998)

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Being entirely vegetable, they op-erate without disturbance to the system, diet, or occupation. Put up in glass vials, hermeti-cally scaled. Always fresh and reliable. As a laxative, alterative, or purgative, these little Pellets give the most perfect atisfaction.

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d by the use of Dr. arco's Pleasant Purgative Pellets. arco's Pleasant Purgative of these Fierce's Pleasant Purgation of the remedial power of In explanation of the remedial power of Pellets over so great a variety of disea-may truthfully be said that their action the system is universit, not a gland or escaping their sanative influence. So druggins, 50 cents a vial, Manufactured Chemical Laboratory of WorLD's Dispr MEDICAL ASSOCIATION, Buffalo, N. Y.



Chronic Nasal Catarit which here cannot cator.

"Untold Agony from Catarrh."

"Ontoid Agony from Calarry," Prof. W. Harsster, the famous mesmerist, of lineae, N. Y., writes: "Some ten years ago interest untoid age-y from chronic massi entarrh. My family physician gave me up as incurable, and said I must die. My case was such a bad one, that every day, towards sun-set, my voice would become so hoarse I could barely speak above a whisper. In the morning my coupring and clearing of my throat would almost strangle me. By the use of Dr. Sage's Catarrh Remedy, in three months, I was a well man, and the cure has been permanent."



If you are bothered with "hard times" and want to learn, how to turn your time into money quickly and pleasantly, write to B. F. Johnson & Co., Richmond Va. They have a plan on foot that you ought carefully to consider. Consumption Surely Cared. To the Editor:--Please inform your readers that I have a positive remedy for the above named disease. By its timely use thousands of hopeless cases have been permanently cured. I shall be glad to send two hottles of my remedy FREE to any of your readers who have consumption if they will send me their Express and P. O. address. Respectfully, T.A. SLOCUM, M. C., 181 Pearl St., N. Y.

Chiment buys it.—Demoret. On one occasion when General Grani was visiting Boston, a well-known gen the man was entertaining him, and their talk one day while out driving turned upon the Hon. Charles Sumner, of whom the Bostonian was not an ad-inirer. After citing a number of inci-dents to show the objectionalle traits of the lamented Senator, the Bostonian answered: "And, do you knew that, with all his conspictous championship of morals and humanity, he doesn't be-here in the inspiration of the Bible?" While speaking he looked steadily at Grant, expecting, perhaps, some ex-the General took a long purif at his sign, blew the smoke away deliberator. The General took a long purif at his write it, you know."

The young women of a Connectiont town have formed a very laudable or-ganization, known as the "Tongae Guard." Each member drops a penny in a box every time she says a word against anybody. The money is given to the poor, and poverty is rapidly do-creasing in that town.

Most men like to see themselves in "print," but women don't. They prefer silk or satin,

in an intelligent and comprehensive co-opera-tion. Our marvellous material growth and the progress of invention have produced new conditions to which business has been quick to adapt its methods. Do not important charges in population and in the habits and temper of the people require some changes in the methods of Christian work! The undersigned, therefore, unife in calling a General Conterence of all Evangelical Christians in the United States, to be held under the auspices and direction of the Evangelical Alliance for the United States, in the city of Washington, December the 7th, sth, and 9th, 1857, to study in effect the fol-lowing questions: Ist. What are the present perils and op-portanities of the Christian Church and of the counzry!

portanities of the Christian Church and of the country! 2nd. Can any of them be met best by a hearty co-operation of all Evangelical Chris-tians, which, without detriment to any denominational interests, will serve the welfare of the whole church! 2d. What are the best means to secure such co-operation, and to waken the whole church to its responsibility! Signed by William E. Dodge, president, and Kev. Josiah Strong, general secretary of the U. S. Evangelical Alliance and nearly 100 of the leading clergy of the country, of all denominations.

A man's heart gets cold if he does not keep it warm by living in it, and a sensorious man is one who ordinarily lives out of his own heart.--(F. W. Faber.

Consumption, Scroftale, General Debitty, Wasting Diseases of Children.
Cook over the list of drunkards that you are acquinted with; think they have committed, and tell me if you think they deserve spring chicken for bread Dides of the states of Scorf's Euroscos of Pure Cod by the use of Scorf's Euroscos of Appetite. Emalation, seened to a lock well is Island, where there are name to the day they first put in appearance there.
There has been enough of persuasion (good as it is) to convert every drunkard in this convert y earns ago. It rolls of them its water from a duck's back. They drink to get soler. In any end, and they drink to get soler. In the bost publications for many years ago, It rolls of them its they will be to have chicken in her mouth! Ought he to have chicken in her mouth? Ought he to have chicken in her mouth? Ought he to have chicken in the additione attempt by other there are and the of the sole of the first weard in the sole of the firs read to make a the ease and the othere there are an aday in t

The Results of Persuasion. Years have been spent in persuading men to stop drinking intoxicating liquors, save George R. Scott, in the Wilness. Inebiato Homes have also been started with the hopo that the influences there exceted, and the good food there given, mightlead to a better way of living. One by one these Homes have closed their doors. The gin-mills outside have proved too powerful a temptation; and the doctrine of an appetite taken away has often failed the victim in his hour of need. While on a visit to one of these institutions a gentle-man informed me that he had no doubt of the reform aign of his friend. "In this estab-lishment he has spring chicken instead of scolding from his wife." After listening for about fifteen minutes to the history of the young inebriate and the way he had treated his wife, enployer and children, I could not hepremarking." Hon't think spring chicken will cure your friend; if this institution had a cat-of-nine tails and a strong man to apply it to his back there would be more hope of his reform." Spring chicken as a premium for wong-doing ought tobe "played-out" by this item.

The Results of Persuasion

tories. dogs to lie quietly in their kennels? Why don't people seek to protect themselves from burglars by persuasion? Because they have too much sense in these matters.

Temperance News and Notes. The three Grand Lodges of Good Templar in South Africa have each a lecturer in the field.

field. England's liquor bill, if converted into sovereigns and laid in a line, would reach nearly 2,000 miles. The sail of every kind of liquor was abso-lutely prohibited on and about the grounds of the great industrial exhibition in Toronto. The W. C. T. U. of Allegheney County, Pennsylvania, has secured the appointment of a police matron at the fine new county jail.

jail. ' The proof of the pudding is in the eating, says the Voice. The proof of Prohibition is in the bitter empity the liquor men evines toward it. Eighty-one cities and counties have voted upon the Canadian temperance act, and the record shows 49,000 majority for the suppres-sion of the liquor traffic.

sion of the liquor traffic. The women of Tennessee worked like beavers for the cause of Prohibition in the re-report general election held in that State. They not only maintained free coffee booths at the polls in the principal cities, but they in many Memphis and Nasiaville wards made a louse to house canvass, railying carcles voters. Their determined efforts gained the Pro-bibition cause many votes. Mr. Philip Moses, a talented minister of Australia, has given up his pastorate, and will henceted device himself to temperance work. Since January he has organized eight W. C. T. Unions, besides five totat abstineness oscieties for men and women, and has given up delays. Mr. Moses will visit forg-and and America next year to study the re-term in all its aspects.



by all druggists. \$1; six for \$5. Prep. I. HOOD & CO., Apothecarles, Lowell, 100 Doses One Dollar





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FOR CHOLERA INFANTUM

IT WILL CURE THE MOST AG IT WILL STOP VONITIN IT WILL RELIEV Take DYGESTYLIN will effect an immunate out of the immunate of the strength of