ABOUT ALCOHOL HEART.

IF YOU HAVE ONE YOU'D BETTER LEAVE DRINK ALONE.

Alcohol Not Always Injurious-Up to Certain Point it is Beneficial to the Physical Condition—After That, Poison -Under Any Circumstances it Would be Well to Give Alcohol a Wide Berth

Alcohol heart is a term which is frequently used by physicians to describe an ailment which is rapidly increasing, especially in cities. The public probably usually understands by the expression a generally debilitated condition of the patient, manifested by a quavering or fluttering of the heart, and due to excessive use of strong drink. This conception is quite correct as far as it goes, but it does not cover the case. In some elaborate experiments recently performed abroad by T. Sauder Brunton, Fellow of the Royal Society, it is shown that alcohol, together with some other anæsthetics, has a peculiar effect on the heart. This effect is not generally understood by physicians.

Alcohol, ether and chloroform are all poisons. This statement does not amount to much unless you know precisely what is meant by the word poison. Almost every substance may be said to be poisonous is you take enough of it. When doctors use the word poisonous they mean that the body having that quality is an enemy of the body of man. If pure alcohol be poured into a cut it will irritate the sensory nerves and burn

LIKE A RED-HOT IRON,

while it will coagulate and kill the blood, muscle or any albuminous tissues, rendering them hard and unfit for the functions of life. This shows that pure alcohol is a poison. If you mix a little beef juice with alcohol the whole of the beef juice with alcohol the whole of the albumen, one of the essential components of the beef, will be precipitated or separated from the juice, and deposited on the bottom of the vessel. What we thus see happening in this experiment has also been supposed to occur in nerve cells. The anæsthetic, or benumbing quality of alcohol, has been supposed to be due to its ausing a sort of cosgulation or congestion causing a sort of coagulation or congestion of the nerve cells, or, at any rate, such a change in the substances composing them as to render them sluggish and incapable of performing their functions.

Those who have taken pure alcohol into

performing their functions.

Those who have taken pure alcohol into the mouth with a view to cleaning out a pipe or for any other purpose have no doubt experienced a very disagreeable sensation, as if they had begun the operation of swallowing a quantity of liquid fire. The action of the alcohol on the mucous membrane of the mouth irritates the membrane of the cheek and makes it turn white by causing a sudden hardening or coagulation of the albumen it contains. If chloroform could be used instead of alcohol the experimenter would have a very fine illustration of the more powerful action of the former, for it not only causes much greater irritation but much more rapid and excessive whitening. Even when applied to the exterior skin of the body it causes a similar whitening.

causes a similar whitening.

If alcohol or chloroform be applied to a piece of skin which has been deprived of its piece of skin which has been deprived of its spidermis, or outer covering, a sensation is experienced like that which would be caused by contact with a red-hot iron. If alcohol be applied to the skin and its evaporation be prevented by covering it with oil silk it will also assets. will also cause

A FEELING OF BURNING.

This is still more marked in the case of shloroform, and the burning may become so painful that it can hardly be endured. All these experiments show that pure alcohol

is a poison.

If, now, instead of putting liquid alcohol or chloroform in the mouth the vapor only is inhaled or if the liquid be swallowed in a diluted form no pain and no whitening will result. This is a very important and a very fortunate circumstance for those who use strong drink, for if alcohol should have the same affect on the membrane. the same effect on the membrane when diluted as it does in an undiluted form it would inevitably cause death. Alcohol, would inevitably cause death. Alcohol, ether or chloroform will destroy any of the tissues if applied in a concentrated form, but when diluted will act rather as a stimulant and will produce no marked injury. When chloroform is injected into the artery of the limb it will coagulate all the muscles and make the limb as stiff as a board. When injected into the beart the muscular substance of the organ will be coagulated and its motion suspended or arrested. These heart experiments are usually performed upon frogs. After a frog has been properly cut open its heart may be easily seen to beat for a long time before death.

The effect of swallowing diluted alcohol The effect of swallowing diluted alcohol is much the same as that caused by inhaling chloroform, as far as the physical manifestations are concerned. An overdose of diluted alcohol will cause insensibility, and the same is true of the fumes of chloroform breathed too freely. But the sensation between a state of perfect sensibility to one of insensibility is more or less stimulating. The diluted anæsthetic does not have the peculiar power above noted of coagulating the blood and hence interfering with its proper functions. Consequently, when the blood has taken up a sufficient quantity, the

RESPIRATION IS PARALYZED,

while the heart continues to beat. In this a wake.

while the heart continues to beat. In this respect the action of alcohol is precisely the same as that of the ordinary asphyxia the same as that of the ordinary asphyxia the description of alcohol is precisely the same as that of the ordinary asphyxia the landlord's voice from the other side of the landlord's voice from the other side of broadness and state of the mucous of the bronchial tubes. The heartaction remains unimpaired, but the respiratory or breathing system is interfered with. It has been

unimpaired, but the respiratory or breathing system is interfered with. It has been found that a period of time, longer in some cases and shorter in others, elapses between the stoppage of the respiration and the stoppage of the heart.

But—and this point is the saving clause for all those who are fond of an occasional glass of beer or a nip of something stronger—another feature of the action of alcohol must be accounted for bofore we stop the patient's breathing entirely. Long before the danger point has been reached alcohol reduces the blood pressure. This is not

dangerous, but, on the contrary, is rather associated with a rapid circulation and consequent stimulant effect which is so well known in the case of alcohol. This fall of blood pressure may be useful instead of injurious in the case of a feeble heart by lessening the resistance it has to overcome. The action of alcohol on the heart is quite well shown by means of an electrical instrument which is fitted to the body and so arranged as to make a tracing on a sheet

instrument which is fitted to the body and so arranged as to make a tracing on a sheet of paper. This tracing shows the force of the main beat of the pulse, of the intermediate or reflex beat, and the length and regularity or irregularity of the interval between the successive pulsations.

Therefore, instead of tending to stop the action of the heart, alcohol, insomuch as it reduces the blood pressure, actually gives the heart freer scope and causes it to

BEAT MORE VIGOROUSLY and frequently. In a normal case, then, the administration of an anaesthetic, or the swallowing of an alloholic beverage, is quite harmless. It is hardly necessary to add that this fall of blood pressure is carefully to be distinguished from that which occurs in an overdose, for if the administration of the ansæthetic be pushed too far the blood pressure will fall continuously, and its depression, at first slight and harmless, will finally become so great that the blood will cease to circulate and the animal will die. and frequently. In a normal case, then, the

die.

This is what is likely to occur when a man becomes afflicted with analcohol heart. He has taken the drug so freely that all of the functions have begun to collapse, and the anæsthetic no longer acts as a mere stimulant. A few more doses will, when the patient has arrived at this condition, almost always result in death. In the case of a hard drinker the heart action has become impaired and is consequently abnormally liable to the "alcoholic" condition.

Used in moderation, alcohol has no effect on the physical constitution. What effect it may have when used even in minto the doses on the moral temperament is a totally different matter. But, considered with regard to its effect on the physical constitution, there is a point beyond which a person cannot well go. Beyond that point diluted alcohol becomes a poison.

SOMEWHAT CURIOUS.

Divorce is greatly on the increase in

Wild dogs begin to be a nuisance in ome parts of Kansas.

A Maine mother has an old slipper, still in use, which has spanked six generations of her family.

There is a man in Missouri whose feet are so large that he has to put his trousers on over his head. In marching soldiers take seventy-five

steps per minute, quick marching 108, and in charging 150 steps. The tolegraph, wire used in the United States would go around the world something

like fifteen times. Pennsylvania produces 100,000,000 toni

of coal every year—more than half output of the entire country. When a snake has gorged itself with

scales are some distance apart. A South Carolina widow became her own mother-in-law recently. That is to say, she is now the wife of her husband's father.

More mountain climbers have been ser iously hurt in the Alps this season than ever before in an equal length of time.

A Swiss scientist has been testing the presence of bacteria in the mountain air, and finds that not a single microbe exists above an altitude of 2,000 feet.

A. West Virginia man is so peculiarly affected by riding on a train that he has to chain himself to a seat to prevent his jumping out of the car window.

Wheat can be grown in the Alps at an elevation of 3,600 feet; in Brazil, at 5,000; in the Caucasus, at 8,000; in Abyssinia, at 10,000; in Peru and Bolivia at 11,000.

A Minnesota girl of 15 can distinguish no color, everything being white to her, and she is compelled to wear dark glasses to protect her eyes from the glare.

en route and granted the petition before getting off the train.

Accommodating Landlord.

A correspondent assures us that he never knew that it was possible for an innkeeper to be too accommodating to his guests distressed needle woman at one time so until he went down to Nova Scotia recently prevalent. Typewriters get double the and put up at a pleansaut little hotel in the country. The landlord of this hotel laid it down as one of his principles of action to

the door; "two hours more to heep?" It is needless to say that the guest slept no more that morning. The landlord's anxiety to be "extra accommodating" failed of its mark that time.

A Morning Scare.

Mrs. Bings (shaking her sleeping husband)—Wake up, quick! Something is wrong! I'm afraid the house is on fire!
Mr. Bings—Eh? What?
Mrs. Bings—Something is wrong. It's only six o'clock, and the girl is up and down stairs.

HOMES OF BRITISH WRITERS.

Country and Suburban Residences and Workshops of Famous English Literary Men and Women.

Very few people know in what part of England the famous British writers of the day live. Some information on this subject will therefore be both valuable and useful. Mrs. Oliphant has her home at Windsor where she has been more than once visited by the Queen, but latterly she has been in he South of France. Thomas Hardy is located in the very heart of Wessex, of whose people he has written so much, and his house is in the town of Dorchester, William Black spends part of his time at Brighton and part in London, alternating between the two places, as does George Augustus Sala. The poet Swinburne and his close friend, Theodore Watts, have homes on Putney Heath, one of London's suburbs.

The suburbs of London, in fact, seem to

The suburbs of London, in taot, seem to have a great attraction for writers of the modern British school. The famous Dr. Parker, of the City Temple, and the no less famous Walter Besant, now knighted, have built themselves house in Hampstead. Not very far away on Hampstead Heath itself is Du Maurier's chateau-like house. George Meredith has what is called.

A CHALET ON BOX HILL.

near Dorking. George Gissing, one of the newer men, who has made great strides of late with his "Eve's Ransom" and "In the Year of Jubilee," both realistic novels of lower middle class life, is one of the Surrey dwellers. Formerly his residence was in Brixton, a suburb which is very-prosaic for the most part and inhabited very largely by the middle class, but which has a few pretty houses. Now very largely by the middle class, but which has a few pretty houses. Now Gissing lives in Epson. James Payn, the noveling lit, is to be found in Maida Vale.

Gissing lives in Epson. James Payn, the novelist, is to be found in Maida Vale.

J. M. Barrie and Jerome K. Jerome have houses in London itself, though Barrie is oftenest to be found at Kirriemur, far up in Scotland. Kirriemur is the original of "Thrums." Jerome used to be a "flat dweller" when he had less money. than he has now, and it is one of the reminiscences of his friends that they used to be obliged to scale six tiresome flights of stairs whenever they came to call on him. Now he is so wealthy that he is able to afford a charming and well adorned house Grant Allen, the scientist and novelist lives at Hindhead, near Hasmelere, and R. D. Blackmore, the author of "Lorna Doone." has a large mansion and gardens at Teddington, not very far from the metropolis, where he spends a good deal more time cultivating fruit then he does in writing books. W. E. Norris lives at Torquay, a town which is said to have the wealthiest inhabitants of any place of its size in England. "Edna Lyall," (Ada Ellen Bayley) is an inhabitant of Eastbourne and Mrs. W. K. Clifford spends most of her time in Kensington.

SPAIN'S INTENTIONS.

A War of Extermination to be Waged or Cuban Rebels.

Madrid despatches of Sep. 10th are being published in Havana. They give the official views of Senor Canovas del Castillo of Madrid, acting for the Government of Spain, concerning the rebellion in this island. His manifesto is a carefully- prepared document, and clearly is the Govern ment programme under which Gen. Martinez Campos will initiate his cool-weather tinez Campos will initiate his cool-weather campaign. The part of Cuba affected by the rebellion—the eastern end of the island—will be freed from all rebels and their adherents. It will be war to extermination or surrender to all Cuban rebels, Marcheretos, and the like. The military organization will be full and complete. It will be root-and-branch work this time, no root will be allowed to remain to create further disturbances. Hereafter Cuba will be for Spain. Spain will enter into the fall campaign with only one object in view—the immediate A Minnesote girl of 15 can distingiush no color, everything being white to her, and she is compelled to wear dark glasses to protect her eyes from the glare.

Fruit cools the blood, cleans the teeth and aids digestion. Those who can't eat it miss the benefit of perhaps the most medicinal food on nature's bill of fare.

A Minnesota judge was due in court at town some miles distant. He adjourned a referred case to the car, heard evidence en route and granted the petition before

More Machinery and Better Pay. Ordinary municipal revenue. Municipal and school taxes, b. 11,975,445

ships.

Since the extensive introduction of the sewing-machines we do not hear of the prevalent. Typewriters get double the wages they would get as penwriters, and they do six times as much work with comparative pleasure and great leisure. Steamships costing millions, equipped with every known invention for safe and efficient service, in six days at a normal cost, with every comfort, take weekly with almost unfailing regularity thousands of people across the Atlantic, where in 1790 it took Samuel Slater, the honored founder of the cotton trade, sixty-six days to cross. of the cotton trade, sixty-six days to cross and no doubt with great discomfort and danger. Small newspapers cost, at one time, 6c, 8c and 12c, and were loaded with

Ingenious Excuse.

Frank comes into the house in a sorry

plight.

Meroy on us! exclaims his father.
How you look! You are soaked.
Please, papa, I fell into the canal.
What! with your new trousers on?
Yes, papa, I didn't have time to take them off.

Didn't Order the Carriage.

Mrs. De Fashion—You thoughtless child.

You must have been walking on them.

INTERESTING STATISTICS

ONE-FIFTH OF ONTARIO'S TAXES GOES FOR INTEREST.

Valuable Report From the Bureau of Industries—Begrowed Moneys. Tem-porary and Bonded, Take a Compleu-ous Place in the Receipts of the Municipalities—Some Figures Worth

The Ontario Bureau of Industries has ust issued part VI. of its annual report of 894. This part is entirely devoted to the statistics of the municipalities of Ontario Returns, showing population, assessed values, taxation and the financial transactions of the several municipalities are here compiled and tabulated, making a book of 168 compact pages. The statistics are brought down to Dec. 31, 1893. A report published last year brought the figure down to Dec. 31, 1890, so that the present volume gives the details for three years, a regards the receipts, disbursements, assets and liabilities of 488 townships, 12 cities, 96 towns, 135 townships and 38 counties, or 769 municipalities in all. The Bureau began the collection of these statistics in 1886, and comparative totals are given for the province for the eight years, such totals being classified by townships, cities, towns, villages and county municipalities.

AS TO POPULATION. The figures for population are those take en by municipal assessors. The total in 1893 for all municipalities was 1,910,059,or only 532 in excess of 1892. The following shows the comparative growth by municipalities since 1886:

Cities ... 389,030 311,187
Towns ... 293,946 - 386,452
Villages ... 130,099

Total.....1,910,059 1,828,495 The bulk of the increase has taken place in the cities for 1893.

ASSESSED VALUES.

The total assessed value for all municipalities for 1893 was \$825,530,052, or an increase of \$318,925 over 1892. The following shows the change since 1886:

| | 1893 | 1886 |
|-----------|---------------|---------------|
| Townships | \$451,629,103 | \$452,097,645 |
| Cities | 247,770,952 | 150,824,091 |
| Towns | 96,225,551 | |
| Villages | 29,904,546 | 91,458,923 |
| | | |

Total......\$825,530,052 \$694,380,659
During this period the real estate in townships increased from \$424,356,217 to \$448,311,559, but in 1889 live stock was practically exempted, resulting in a decrease in personal property of townships that year of \$23,155,121.

THE TAX LEVY.

THE TAX LEVY.

The tax bills for municipal and school purposes take another bound, and in 1893 the total placed upon the collectors' rolls was \$12,522,660, an increase of \$719,690 as compared with the rate of 1892. The average per head of municipal population increased from \$4.93 in 1886 to \$6.56 in 1893 while the average rate on the dollar. increased from \$4.93 in 1880 to \$6.50 in 1893, while the average rate on the dollar rose from 12.97 to 15.17 mills in the same

| period. The tax levy as follows: | y by municipanties is | ľ |
|----------------------------------|---|---|
| * | 1893 1886 | 1 |
| Townships | \$4,029,020 \pri,000, TOI | 1 |
| | 5,314,082 2,000,000 | ľ |
| Towns | 1,979,893 | |
| Townships Cities Towns | \$4,629,028 \$4,388,401 5,374,682 2,888,599 1,979,893 | |

Total \$12,522,660 \$9,009,385 The rate per head of population in townships increased from \$3.82 to \$4.22 in this period; in cities from \$9.28 to \$13.82, and in towns and villages from \$4.70 to

\$5.94.

The twelve cities contribute over 20 per cent. of the entire population of the prov-ince, 30 per cent. of the assessed values and over 40 per cent. of the taxes.

FINANCIAL TRANSACTIONS.

The tabulated abstract statement of The tabulated abstract statement of financial transaction, however, forms the chief feature of this report. Passing rapidly over the details we come to the comparative tables showing the aggregates for each item for the several classes of municipalities. The following is a summary of the totals for all the municipalities:

Balance from previous year, a . \$ 1,698,895 | island.

| Municipal and sensor care | 856,929 |
|----------------------------------|--------------|
| Licenses, fees, fines, etc., a | |
| Water rates, gas rates, etc., c. | . 995,429 |
| Surplus fees from registrar, d. | 16,365 |
| Surplus fees from registration | |
| Rates from local municipalitie | 3 201 000 |
| d | . 1,231,039 |
| Subsidies and refunds: | |
| Received from Government | n |
| account of- | |
| account of- | . 139,714 |
| *Schools, d | |
| Administration of justice, d | |
| Refund of moneys loaned of | or |
| invested, a | 1,240,663 |
| | |
| Loans: | |
| Money borrowed for curren | 11 000 |
| aunongag & | . 0,/11,000 |
| Money borrowed on debe | ntures (face |
| value) for- | 1 000 00" |
| Other nurposes, a | . 4,266,935 |
| Non-resident taxes collected, | d 95,026 |
| Molleteproper aware and | |

67,100 1,271,427 Construction works: Roads, bridges, streets, parks, Building and other works, a ...

632,230 275,941 -997,080

County treasurer for levy, g.... Schools and Education, a..... Sinking fund and other invest-1,813,254 3,574.353 pal) a..... Interest on loans, advances and debentures, a...
Refund of money borrowed for current expenses, a...
Miscellaneous, a...
Miscellaneous, a... 2,508,691 4.952.809 95,820 813,50**2** Total\$28,056,502 ASSETS. 654.171 9,870,539 Total.....\$60,092,229 LIABILITIES.

County levy, g......\$ 606,103
School rates and grants unpaid a, 561,234
Debentures outstanding (principal) for—
Aid to railways, a.....5,079,604
Schools, a.....3,885,401 3,639,384 Total\$54,879,665 *The Government grants to counties

only are shown here.

(a) All municipalities; (b) townships, cities, towns and villages; (c) cities, towns and villages; (d) counties; (e) townships; (f) counties, cities, towns and villages; (g) townships, towns and villages.

BORROWED MONEYS.

It will be seen that borrowed moneys, temporary and bonded, take's conspicuous place in the receipts of the municipalities, and the redemption of the same forms a serious charge on the taxpayers. The interest paid is equivalent to one-fifth of the taxes levied. The total interest paid in 1893 was \$2,508,691, of which the cities pay \$1,639,763. Toronto paid \$385,955. The expenses of municipal government advanced from \$1,761,361 in 1886 to \$2,664,565 in 1893. Administration of justice by the municipalities averages a million dollars, while over four million dollars are paid to schools.

The bonded debt, exclusive of interest, on Dec. 31, 1893, was \$48,083,243 or \$28.

The bonded debt, exclusive of indecases, on Dec. 31, 1893, was \$43,083,243 or \$28.—17 per capita. This is an increase of \$7,-362,268 in three years, while the net increase since 1886 is over 60 per cent. The following will show how this is made up:

| Townships | 1893. | 1886. \$ 3,153,646 |
|-----------|-------------------------------------|------------------------|
| Cities | 33,102,012 | 18,254,740 |
| Towns | 8,463,849 1,137,967 2,339,592 | 5,010,733 3,505,744 |

Total......\$48,083,243 \$29,924,963 Total.........\$48,083,243 \$29,924,963

The twelve cities at \$85 per capita carry over two-thirds of the municipal bonded debt. The debenture debt of Toronto city was placed at \$19,745,944,of which \$1,130,718 was for railways,\$1,488,678 for schools and the balance almost equally divided between "local improvements" and general purposes. In 1886 the debt of Toronto was \$8,844,964, or less than 30 per cent. of all municipalities, while in 1893 it was over 40 per cent.

OVERRUN BY RATS.

An Army of Vermin Takes Possession of the Island of Tropic.

The island of Tropic, twenty miles south of the Flordia coast has been invaded by an army of savage rats, and the inhabitants have been forced to flee for their lives. Tropic is three miles long and two miles wide and the soil is very fertile. A dozen families have settled on the island and engaged in growing vegetables for market. George Butler, one of the settlers, tells a thrilling story of the invasion and subjugthrilling story of the invasion and subjugation of Tropic by the rats. Up to a month ago, according to Mr. Butler, there were no rats on the island. At that time the advanced guard of the rodehts arrived, and were quickly followed by others, until two weeks there were fully 10,000 on the

The rate came from the mainland, which was only two miles away, and Mr. Butler affirms that they swam across. He says he was only two miles away, and MrA Butler affirms that they swam across. He says he has seen them coming out of the water by hundreds. At first the rats contented themselves with attacking the vegetables, which were soon destroyed. Then they invaded the romes of settlers. The latter made war on the rats, killing hundreds of them. Mr. Butler says he has killed as many as 100 at one shot, but others would rush forward and attack him, biting him viciously on the legs.

In spite of the slaughter the rats got into the houses and attacked the women and children. Several of the latter were badly torn by the sharp fangs of the rodents. One baby was so severely bitten about the face that its life is despaired of.

For three nights, Mr. Butler says, not a soul on the island slept, as that would have meant death. At last the people, in terror and worn out, fled in their boats to the mainland, where they are now camped in a destitute condition. Mr. Butler says the rats pursued them to the water's edge, and the weren and children were repeatedly

a destitute condition. Mr. Butler says the rats pursued them to the water's edge, and the women and children were repeatedly bitten before the boats could be pushed off. Every vestige of vegetation had been destroyed. The rate are described as gray in color and monstrous in size being larger than squirrels.

A "High Tea."

Mrs. Brickrow—The paper says Mrs. Brownstone gave a high tea yesterday. What on 'arth is that?

Mr. Brickrow—Tea wot cost a dollar a pound, of course.

One of the commercial new womes has at one of the seashore resorts an electric fan for drying the hair of women bathers and is overrun by customers.