Study and stimulants, or, The use of intoxicants and narcotics in relation to intellectual life, as illustrated by personal communications on the subject, from men of letters and of science / edited by A. Arthur Reade.

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STUDY AND STIMULANTS.

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OR,

THE USE OF INTOXICANTS AND NARCOTICS IN RELATION TO INTELLECTUAL LIFE,

AS ILLUSTRATED BY PERSONAL COMMUNICATIONS ON THE SUBJECT, FROM MEN OF LETTERS AND OF SCIENCE.

EDITED BY

A. ARTHUR READE.

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INTRODUCTION.

THE real influence of the intoxicants and narcotics in common use has been a matter of fierce and prolonged controversy. The most opposite opinions have been set forth with ability and earnestness; but the weight they would otherwise carry is lessened by their mutually contradictory character. Notwithstanding the great influence of the physician's authority, people are perplexed by the blessings and bannings bestowed upon tobacco and the various forms of alcohol.

What is the real influence of stimulants and narcotics upon the brain? Do they give increased strength, greater lucidity of mind and more continuous power? Do they weaken and cloud the intellect, and lessen that capacity for enduring a prolonged strain of mental exertion which is one of the first requisites of the intellectual life? Would a man who is about to enter upon the consideration of problems, the correct solution of which will demand all the strength and agility of his mind, be helped or hindered by their use? These are questions which are asked every day, and especially by the young,

who seek in vain for an adequate reply. The student grappling with the early difficulties of science and literature, wishes to know whether he will be wiser to use or to abstain from stimulants.

The theoretical aspect of the question has perhaps been sufficiently discussed; but there still remains the practical inquiry,—"What has been the experience of those engaged in intellectual work?" Have men of science—the inventors, the statesmen, the essayists, and novelists of our own day—found advantage or the reverse in the use of alcohol and tobacco?

The problem has for years exercised my thoughts, and with the hope of arriving at *data* which would be trustworthy and decisive, I entered upon an independent inquiry among the representatives of literature, science, and art, in Europe and America. The replies were not only numerous, but in most cases covered wider ground than that originally contemplated. Many of the writers give details of their habits of work, and thus, in addition to the value of the testimony on this special topic, the letters throw great light upon the methods of the intellectual life.

To each writer, and especially to Dr. Alex. Bain, Mr. R. E. Francillon, Mark Twain, Mr. E. O'Donovan, Mr. J. E. Boehm, Professor Dowden, the Rev. Dr.

Martineau, Count Gubernatis, the Abbé Moigno, and Professor Magnus, who have shown hearty interest in the enquiry, I tender my best thanks for contributing to the solution of the important problem of the value of stimulants; also to Mr. W. E. A. Axon for suggestive and much appreciated help. I should, however, be glad of further testimonies for use in a second edition.

January, 1883.

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STUDY AND STIMULANTS.

THE REV. DR. ABBOT,

EDITOR OF THE "CHRISTIAN UNION," NEW YORK.

I have no experience whatever respecting tobacco: my general opinion is adverse to its use by a healthy man; but that opinion is not founded on any personal experience, nor on any scientific knowledge, as to give it any value for others. My opinion respecting alcohol is that it is a valuable and necessary ingredient in forming and preserving some articles of diet—yeast bread, for example, which can only be produced by fermentation—and that its value in the lighter wines, those in which it is found in a ratio of from 5 to 10 per cent., is of the same character. It preserves for use other elements in the juice of the grape. As a stimulant, alcohol is, in my opinion, at once a deadly poison and a valuable medicine, to be ranked with belladonna, arsenic, prussic acid, and other toxical agents,

which can never be safely dispensed with by the medical faculty, nor safely used by laymen as a stimulant, except under medical advice. As to my experience, it is very limited; and, in my judgment, it is quite unsafe in this matter to make one man's experience another man's guide: too much depends upon temperamental and constitutional peculiarities, and upon special conditions of climate and the like.

1. I have no experience respecting distilled spirits; I regard them as highly dangerous, and have never used them except under medical advice, and then only in rare and serious cases of illness. 2. Beers and the lighter wines, if taken before mental work, always—in my experience—impair the working powers. They do not facilitate, but impede brain action. 3. After an exceptionally hard day's work, when the nervous power is exhausted, and the stomach is not able to digest and assimilate the food which the system needs, a glass of light wine, taken with the dinner, is a better aid to digestion than any other medicine that I know. To serve this purpose, its use—in my opinion—should be exceptional, not habitual: it is a medicine, not a beverage. 4. After nervous excitement in the evening, especially public speaking, a glass of light beer serves a useful purpose as a sedative, and ensures at times a

good sleep, when without it the night would be one of imperfect sleep.

I must repeat that my experience is very limited; that in my judgment the cases which justify a man in so overtaxing his system that he requires a medicine to enable him to digest his dinner or enjoy his sleep must be rare; and that my own use of either wine or beer is very exceptional. Though I am not in strictness of speech a total abstinence man, I am ordinarily a water drinker.

LYMAN ABBOT.

March 11, 1882.

MR. S. AUSTIN ALLIBONE,

NEW YORK.

I have no doubt that the use of alcohol as a rule is very injurious to all persons—authors included. In about 17 years (1853-1870), in which I was engaged on the "Dictionary of English Literature and Authors," I never took it but for medicine, and very seldom.

Moderate smoking after meals I think useful to those who use their brains much ; and this seems to have been the opinion of the majority of the physicians who took part in the controversy in the *Lancet* about ten or twelve years since. An energetic non-smoker is in haste to rush to his work soon after dinner. A smoker is willing to rest (it should be for an hour), because he can enjoy his cigar, and his conscience is satisfied, which is a great thing for digestion ; the brain is soothed also.

S. Austin Allibone.

March 27, 1882.

The DUKE OF ARGYLL, F.R.S.

In answer to your question, I can only say that during by far the greatest part of my life I never took alcohol in any form ; and that only in recent years I have taken a small fixed quantity under medical advice, as a preventive of gout. Tobacco I have never touched.

Argyll.

October 2, 1882.

Mr. MATTHEW ARNOLD.

In reply to your enquiry, I have to inform you that I have never smoked, and have always drunk wine, chiefly claret. As to the use of wine, I can only speak for myself. Of course, there is the danger of excess; but a healthy nature and the power of self-control being pre-supposed, one can hardly do better, I should think, than "follow nature" as to what one drinks, and its times and quantity. As a general rule, I drink water in the middle of the day; and a glass or two of sherry, and some light claret, mixed with water, at a late dinner; and this seems to suit me very well. I have given up beer in the middle of the day, not because I experienced that it did not suit me, but because the doctor assured me that it was bad for rheumatism, from which I sometimes suffer. I suppose most young people could do as much without wine as with it. Real brain-work of itself, I think, upsets the worker, and makes him bilious; wine will not cure this, nor will abstaining from wine prevent it. But, in general, wine used in moderation seems to add to the *agreeableness* of life—for adults, at any rate; and

whatever adds to the agreeableness of life adds to its resources and powers.

MATTHEW ARNOLD.

November 4, 1882.

PROFESSOR AYRTON

Has no very definite opinions as to the effects of tobacco and alcohol upon the mind and health, but as he is not in the habit of either taking alcohol or of smoking, he cannot regard those habits as essential to mental exertion.

April 21, 1882.

DR. ALEXANDER BAIN,

LORD RECTOR OF ABERDEEN UNIVERSITY.

I am interested in the fact that anyone is engaged in a thorough investigation of the action of stimulants. Although the subject falls under my own studies in some degree, I am a very indifferent testimony as far

as concerns personal experience. On the action of tobacco, I am disqualified to speak, from never having used it. As to the other stimulants—alcohol and the tea group—I find abstinence essential to intellectual effort. They induce a false excitement, not compatible with severe application to problems of difficulty. They come in well enough at the end of the day as soothing, or cheering, and also as diverting the thoughts into other channels. In my early intercourse with my friend, Dr. Carpenter, when he was a strict teetotaler, he used to discredit the effect of alcohol in soothing the excitement of prolonged intellectual work. I have always considered, however, that there is something in it. Excess of tea I have good reason to deprecate; I take it only once a day. The difficulty that presses upon me on the whole subject is this:—In organic influences, you are not at liberty to lay down the law of concomitant variations without exception, or to affirm that what is bad in large quantities, is simply less bad when the quantity is small. There may be proportions not only innocuous, but beneficial; reasoning from the analogy of the action of many drugs which present the greatest opposition of effect in different quantities. I mean this—not with reference to the inutility for intellectual stimulation, in which I have a pretty clear opinion

as regards myself—but as to the harmlessness in the long run, of the employment of stimulants for solace and pleasure when kept to what we call moderation. A friend of mine heard Thackeray say that he got some of his best thoughts when driving home from dining out, with his skin full of wine. That a man might get chance suggestions by the nervous excitement, I have no doubt; I speak of the serious work of composition. John Stuart Mill never used tobacco; I believe he had always a moderate quantity of wine to dinner. He frequently made the remark that he believed the giving up of wine would be apt to be followed by taking more food than was necessary, merely for the sake of stimulation. Assuming the use of stimulants after work to aid the subsidence of the brain, I can quite conceive that tobacco may operate in this way, as often averred; but I should have supposed that any single stimulant would be enough: as tobacco for those abstaining entirely from alcohol, and using little tea or coffee.

ALEXANDER BAIN.

March 6, 1882.

Professor ROBERT S. BALL, LL.D., F.R.S.,

Andrews Professor of Astronomy in the University of Dublin, and Royal Astronomer of Ireland.

I fear my experience can be of little use to you. I have never smoked except once—when at school; I then got sick, and have never desired to smoke since. I have not paid particular attention to the subject, but I have never seen anything to make me believe that tobacco was of real use to intellectual workers. I have known of people being injured by smoking too much, but I never heard of anyone suffering from not smoking at all.

Robert S. Ball.

February 13, 1882.

Mr. HUBERT HOWE BANCROFT,

San Francisco.

In my opinion, some constitutions are benefited by a moderate use of tobacco and alcohol; others are not. But to touch these things is dangerous.

H. H. Bancroft.

May 6, 1882.

Mr. JOSEPH BAXENDELL, F.R.A.S.

I fear that my experience of the results of the use of stimulants will not aid you much in your enquiry. Although I am not a professed teetotaler or anti-smoker, practically I may say I am one: and when I am engaged in literary work, scientific investigations, or long and complicated calculations, I never think of taking any stimulant to aid or refresh me, and I doubt whether it would be of any use to do so.

Joseph Baxendell.

February 20, 1882.

Dr. G. M. BEARD,

Fellow of the New York Academy of Medicine.

In reply to your enquiries, I may say—first: I do not find that alcohol is so good a stimulant to thought as coffee, tea, opium, or tobacco. On myself alcohol has rather a benumbing and stupefying effect, whatever may be the dose employed; whereas, tobacco

and opium, in moderate doses, tea, and especially coffee, as well as cocoa, have an effect precisely the reverse.

Secondly: there are many persons on whom alcohol in large or small doses has a stimulating effect on thought: they can speak and think better under its influence. The late Daniel Webster was accustomed to stimulate himself for his great speeches by the use of alcohol.

Thirdly: these stimulants and narcotics, according to the temperament of the person on whom they are used, have effects precisely opposite, either sedative or stimulating; while coffee makes some people sleepy, the majority of persons are made wakeful by it. Some are made very nervous by tobacco in the form of smoking, while on others it acts as a sedative, and induces sleep. General Grant once told me that, if disturbed during the night, or worried about anything so that he could not sleep, he could induce sleep by getting up and smoking a short time—a few whiffs, as I understood him, being sufficient.

If I were to judge by my own experience alone—which it is not fair to do—I should say that coffee is the best stimulant for mental work; next to that tobacco and quinine; but as I grow older, I observe that

alcohol in reasonable doses is beginning to have a stimulating effect.

GEORGE M. BEARD.

March 13, 1882.

PROFESSOR PAUL BERT.

My views on tobacco and alcohol, and their action on the health, may be summed up in the following four propositions:—

1.—Whole populations have attained to a high degree of civilization and prosperity without having known either tobacco or alcohol, therefore, these substances are neither necessary nor even useful to individuals as well as races.

2.—Very considerable quantities of these drugs, taken at a single dose, may cause death; smaller quantities stupefy, or kill more slowly. They are, therefore, poisons against which we must be on our guard.

3.—On the other hand, there are innumerable persons who drink alcoholic beverages, and smoke tobacco, without any detriment to their reason or their health.

There is, therefore, no reason to forbid the use of these substances, while suitably regulating the quantity to be taken.

4.—The use of alcoholic liquors and of tobacco in feeble doses, affords to many persons very great satisfaction, and is altogether harmless and inoffensive.

We ought, therefore, to attach no stigma to their consumption, after having pointed out the danger of their abuse. In short, it is with alcohol and tobacco as with all the pleasures of this life—a question of degree.

As for myself, I never smoke, because I am not fond of tobacco: I very seldom drink alcoholic liquors, but I take wine to all my meals because I like it.

PAUL BERT.

March 1, 1882.

PROFESSOR JOHN STUART BLACKIE.

My idea is, that work done under the influence of any kind of stimulants is unhealthy work, and tends to no good. I never use any kind of stimulant for intellectual

work—only a glass of wine during dinner to sharpen the appetite. As to smoking generally, it is a vile and odious practice; but I do not know that, unless carried to excess, it is in any way unhealthy. Instead of stimulants, literary men should seek for aid in a pleasant variety of occupation, in intervals of perfect rest, in fresh air and exercise, and a cultivation of systematic moderation in all emotions and passions.

J. S. Blackie.

February 9, 1882.

M. LOUIS BLANC.

In answer to your letter, I beg to tell you that I do not know by experience what may be the effects of tobacco and alcohol upon the mind and health, not having been in the habit of taking tobacco and drinking alcohol.

Louis Blanc.

March 9, 1882.

Mr. J. E. BOEHM, R.A.

It will give me great pleasure if I can in any way contribute to your so very interesting researches, and I shall be glad to know whether you have published anything on the subject you have questioned me on. I find vigorous exercise the first and most important stimulant to hard work. I get up in summer at six, in winter at seven, take an hour and a half's hard ride, afterwards a warm bath, a cold douche, and then breakfast. I work from ten to seven generally; but twice or thrice a week I have an additional exercise—an hour's fencing before dinner, which I take at 8 p.m. I take light claret or hock to my dinner, but never touch any wine or spirits at any other times, and eat meat only once in twenty-four hours. I find a small cup of coffee after luncheon very exhilarating. I smoke when hard at work—chiefly cigarettes. After a long sitting (as I do not smoke while working *from nature*), a cigarette is a soother for which I get a perfect craving. In the evening, or when I am in the country doing nothing, I scarcely smoke at all, and do not feel the want of it there; nor do I then take at evening dinner more than one or two glasses of wine, and I have observed that the same quantity which would make me feel giddy in

the country when in full health and vigour, would not have the slightest effect on me when taken after a hard day's work. I also observed that I can work longer without fatigue when I have had my ride, than when for any reason I have to give it up. I have carried this mode of life on for nearly twenty years, and am well and feel young, though forty-eight. I never see any one from ten to three o'clock; after that I still work, but must often suffer interruption. I found that temperament and constitution are rarely, if ever, a legitimate excuse for departure from abstinence and sober habits. I have the conviction that in order to have the eye and the brain clear, you ought to make your skin act vigorously at least once in twenty-four hours.

J. E. Boehm.

February 20, 1882.

Dr. BREDENCAMP,

Erlangen.

In reply to your letter, I am accustomed to smoke. If I do not smoke, I cannot do my work properly; and

it is quite impossible to do any work in the morning without smoking. Strong drink I do not need at all, but I drink two glasses of Bavarian beer, which contains very little alcohol.

E. Bredencamp.

April 18, 1882.

Mr. FORD MADOX BROWN, R.A.

I have smoked for upwards of thirty years, and have given up smoking for the last seven years. Almost all my life I have taken alcoholic liquors in moderation, but have also been a total abstainer for a short period. My experience is that neither course with either ingredient has anything to do with mental work as capacity for it; unless, indeed, we are to except the incapacity produced by excessive drinking, of which, however, I have no personal experience.

F. M. Brown.

Feb. 28, 1882.

Mr. ROBERT BUCHANAN.

I am myself no authority on the subject concerning which you write. I drink myself, but not during the hours of work; and I smoke—pretty habitually. My own experience and belief is, that both alcohol and tobacco, like most blessings, can be turned into curses by habitual self-indulgence. Physiologically speaking, I believe them both to be invaluable to humankind. The cases of dire disease generated by total abstinence from liquor are even more terrible than those caused by excess. With regard to tobacco, I have a notion that it is only dangerous where the vital organism, and particularly the nervous system, is badly nourished.

Robert Buchanan.

March 7, 1882.

Dr. BUDDENSEIG,

Dresden.

I have no decided opinion whatever as to the question you ask. I can only say that I am a very

small smoker, taking one or two cigars daily, and I drink Rhine wine, but not daily, as most scholars or those working with their brains generally do. There can be, I should think, no question that immoderate use of alcohol produces most destructive results.

E. Buddenseig.

Feb. 20, 1882.

Captain FRED. BURNABY.

In my humble opinion, every man must find out for himself whether stimulants are a help to his intellectual efforts. It is impossible to lay down a law. What would, perhaps, enable one man to write brilliantly would make another man write nonsense. I myself, although not an abstainer, should think it a great mistake to seek inspiration in either tobacco or alcohol.

F. Burnaby.

March 2, 1882.

Lieut.-Col. W. F. BUTLER.

In reply to your communication, asking for a statement of my experience as to the effects of tobacco and alcohol upon the mind and health, I beg to inform you that as I have not been in the habit of using the first-named article at any period of my life, I am unable to speak of its effects, mental or otherwise. With regard to alcohol, I have found that although the brain may receive a temporary accession to its production of thought, through the use of wine, etc., such increased action is always followed by a decided weakening of the thinking power, and that on the whole a far greater amount of *even* mental work is to be obtained without the use of alcohol than with it.

W. F. Butler.

Feb. 18, 1882.

Dr. LAUDER BRUNTON, F.R.S.

I am unable to give you personal experience as to the use of tobacco, inasmuch as I do not use it in any

form. From observation of others it appears to me that, when not used to excess, it is serviceable both as a stimulant during work, and as a sedative after work is over.

LAUDER BRUNTON.

Feb. 9, 1882.

MAXIME DU CAMP.

I have never been able to make any experiences on the influence of alcohol upon the mind. I never drink it, and have never been tipsy. I smoke very much, but only the pipe and cigarette. I take two meals every day—one at eleven, consisting of a mutton chop, vegetables, and a cup of tea. I make a hearty dinner at seven, and drink a bottle of Bordeaux wine. I never work in the evening; and go to bed at half-past ten. I think the use of tobacco very useless and rather stupid. As to alcohol, I consider it very hurtful for the liver, and highly injurious to the mind. The life of mental workers should be well regulated and temperate

in all respects. Bodily exercises, such as riding, walking and hunting, are very necessary for the relaxation of the mind, and must be taken occasionally. In my opinion, all intellectual productions are due to a special disposition of the cerebro-spinal system, upon which tobacco and alcohol can have no salutary action. I fear that my answer will be of little help to you; for in these matters I esteem theory nothing. There are, as the Germans say, *idiosyncrasies*.

MAXIME DU CAMP.

Feb. 17, 1882.

DR. W. B. CARPENTER, C.B., LL.D., F.R.S.

In reply to your enquiry, I have to inform you that I have never felt the need of alcoholic stimulants as a help in intellectual efforts; on the contrary, I have found them decidedly injurious in that respect, except when used with the strictest moderation. For about eleven years of the hardest-working period of my life, that in which I produced my large treatises on Physiology, edited the *Medical Quarterly Review*, and did a

great deal of other literary work, besides lecturing, I was practically a total abstainer, though I never took any pledge. I undoubtedly injured myself by over-work during that period, as I have more than once done since under the pressure of official duty; but the injury has shown itself in the failure of appetite and digestive power. After many trials, I have come to the practical conclusion that I get on best, while in London, by taking with my dinner a couple of glasses of very light claret, and simply as an aid in the digestion of the food which is required to keep up my mental and bodily power. But when "on holiday" in Scotland, or elsewhere, I do not find the need of this. I have never smoked tobacco, or used it in any form. I need scarcely say that I have never used any other "nervine stimulants." You are at perfect liberty to make use of this communication.

WM. B. CARPENTER.

Feb. 17, 1882.

Mr. WILLIAM CHAMBERS, LL.D.

In reply to your note, I have only time to say that I never used tobacco in any form all my life, and I can say the same thing regarding my brother, Robert.

William Chambers.

February 10, 1882.

Mr. GEORGE W. CHILDS, Philadelphia.

I fear I shall be unable to add to your fund of information. Never having used spirituous or vinous stimulants, or tobacco in any form, I have no personal "experience" of the way they affect the mental faculties of those who use them.

G. W. Childs.

Sept. 30, 1882.

M. JULES CLARETIE,

PARIS.

I should have been glad to reply to your question from my personal experience, but I do not smoke, and have never in all my life drunk as much as a single glass of alcohol. This plainly shows that I requre no "fillip" or stimulant when at work. Tobacco and alcohol may cause over-excitement of the brain, as does coffee, which I am very fond of; but, in my opinion, that alone is thorough good work which is performed without artificial stimulant, and in full possession of one's health and faculties. The reason we have so many sickly productions in our literature arises probably from the fact that our writers, perhaps, add a little alcohol to their ink, and view life through the fumes of nicotine.

M. JULES CLARETIE.

Feb. 26, 1882.

Mr. HYDE CLARKE, F.S.S.

As I am not an adherent of the teetotal abstinence movement, I beg that everything I write may be accepted with this reservation. I have never seen that any great thinker has found any help or benefit from the use of stimulants—either alcohol or tobacco. My observations and experiences are unfavourable to both classes of stimulants. In my own case, I gave up smoking before my scientific work began. Alcoholic drinks I used moderately, but I was a water drinker chiefly. Of late years, from illness, I have given up alcoholic drinks; but were I in full health, I should use them moderately. In the course of a public life of about forty years, I have seen the ill-effects of drinking upon many journalists and others; but it appears to me that smoking produces still greater evil. A man knows when he is drunk, but he does not know when he has smoked too much, until the effects of accumulation have made themselves permanent. To smoking are to be traced many affections of the eyes, and of the ears, besides other ailments. I have heard much said in favour of smoking and drinking, but never saw any favourable result. The communication of the evil results of these stimulants to offspring appears to me to constitute a

further serious objection to them. I approve fully of your object, but as I do not go to the length of tota abstinence advocates, I am desirous not to be misunderstood. Several years of my life were spent in the East, and my experience there only confirms me the more. I have known many drunkards among literary men, and the stimulants they took never helped their work; and it was only because they were men of exceptionally strong brain that their excesses did not incapacitate them. There are many excesses of this kind that are equally misunderstood by those who indulge in them, and by temperance writers. There are, in fact, many men of enormous power, who can smoke and drink all day long. They constitute no standard: so far as I have seen, the consequences show themselves only in the offspring, though in this case it must be taken into account, that the children are sometimes born before a man's health has been seriously injured. A man of exceptional strength misleads and encourages others to indulge.

HYDE CLARKE.

October 14, 1882.

Mr. WILKIE COLLINS.

When I am ill (I am suffering from gout at this very moment) tobacco is the best friend that my irritable nerves possess. When I am well, but exhausted for the time by a hard day's work, tobacco nerves and composes me. There is my evidence in two words. When a man allows himself to become a glutton in the matter of smoking tobacco, he suffers for it; and if he becomes a glutton in the matter of eating meat, he just as certainly suffers in another way. When I read learned attacks on the practice of smoking, I feel indebted to the writer—he adds largely to the relish of my cigar.

Wilkie Collins.

February 10, 1882.

Mr. MONCURE D. CONWAY, M.A.

My experience of stimulants has been insufficient to enable me to give any important opinion about them. As to tobacco, my strong hope is that my own sons will never use it; but if they should develop peculiar and

excitable nerves, or become very emotional, or have much trouble, it is so likely that they might take to some worse habit that I would prefer they should smoke.

M. D. Conway.

February 22, 1882.

Rev. W. H. DALLINGER, F.R.S.

I am not a pledged abstainer: I have used both tobacco and alcohol in various forms. Neither is at all necessary to my vigour of either body or mind. My use of tobacco has been but slight. I have never used alcohol for years. I could never think deeply after the use of tobacco; I have felt a quickening of thought at times after a slight use of good wine; but I know, from physiological evidence, what practice has certainly proved, that no permanent benefit to either body or mind must be sought from its use. I have employed it with great benefit at times—that is, where it was

better to afford the exhaustion following a mere stimulant, than to submit to an exhaustion which the stimulant could for the moment counteract. This is the only advantage, save to the palate, that I have known to be derived personally from the use of alcohol.

W. H. DALLINGER.

February 11, 1882.

PROFESSOR DARWIN.

I drink a glass of wine daily, and believe I should be better without any, though all doctors urge me to drink wine, as I suffer much from giddiness. I have taken snuff all my life, and regret that I ever acquired the habit, which I have often tried to leave off, and have succeeded for a time. I feel sure that it is a great stimulus and aid in my work. I also daily smoke two little paper cigarettes of Turkish tobacco. This is not a stimulus, but rests me after I have been compelled to talk, with tired memory, more than anything else. I am 73 years old.

CH. DARWIN.

February 9, 1882.

W. BOYD DAWKINS, M.A., F.R.S., F.G.S.

PROFESSOR OF GEOLOGY, OWENS COLLEGE, MANCHESTER.

I have received your note asking about the effect of alcohol on my health and work. I cannot say that they influence either; I find, however, that I cannot drink beer when I am using my brain, and, therefore, do not take it when I have anything of importance to think about. I look upon tobacco and alcohol as merely luxuries, and there are no luxuries more dangerous if you take too much of them. I find quinine the best stimulant to thought.

W. BOYD DAWKINS.

February 16, 1882.

The Rev. ALEX. J. D. D'ORSEY, B.D.,

LECTURER ON PUBLIC READING AND SPEAKING AT KING'S COLLEGE, LONDON.

For my own part, I am decidedly averse to the use of tobacco and stimulants. I am myself a total abstainer (not pledged), and I have never smoked in my

life. I always do my utmost to dissuade young and old alike to abstain from even the moderate use of tobacco and stimulants, as in the course of a long and laborious life, speaking much and preaching without notes, I have always felt able to grapple with my subject, with pleasure to myself and with profit, I trust, to my hearers.

A. J. D. D'Orsey.

March 17, 1882.

Mr. EDMUND O'DONOVAN,

Special Correspondent of the "Daily News."

As far as my experience goes, the use of stimulants enables one at moments of severe bodily exhaustion to make mental efforts of which, but for them, he would be absolutely incapable. For instance, after a long day's ride in the burning sun across the dry stony wastes of Northern Persia, I have arrived in some wretched, mud-built town, and laid down upon my carpet in the corner of some miserable hovel, utterly worn out by

bodily fatigue, mental anxiety, and the worry inseparable from constant association with Eastern servants. It would be necessary to write a long letter to the newspapers before retiring to rest. A judicious use of stimulants has, under such circumstances, not only given me sufficient energy to unpack my writing materials, lie on my face, and propped on both elbows, write for hours by the light of a smoky lamp; but also produced the flow of ideas that previously refused to come out of their mental hiding places, or which presented themselves in a flat and uninteresting form. I consider, then, the use of alcoholic and other stimulation to be conducive to literary labours under circumstances of physical and mental exhaustion; and very often the latter is the normal condition of writers, especially those employed on the press. Perhaps, too, in examining into the nature of some metaphysical and psychological questions the use of alcohol, or some similar stimulant, aids the appreciation of *nuances* of thought which might otherwise escape the cooler and less excited brain. On the other hand, while travelling in the East during the past few years, and when, as a rule, circumstances precluded the possibility of obtaining stimulants, I found that a robust state of health consequent on an out-door life, made the consumption of alcohol in any

shape quite unnecessary. In brief, then, my opinion is, that at a given moment of mental depression or exhaustion, the use of stimulants will restore the mind to a condition of activity and power fully equalling, and in some particular ways, surpassing its normal state. Subsequently to the dying out of the stimulation the brain is left in a still more collapsed situation than before, in other words, must pay the penalty, in the form of an adverse reaction, of having overdrawn its powers, for having, as it were, anticipated its work.

E. O'Donovan.

Feb. 17, 1882.

Professor DOWDEN, LL.D.

I distinguish direct and immediate effect of alcohol on the brain from its indirect effect through the general health of the body. I can only speak for myself. I have no doubt that the direct effect of alcohol on me is intellectually injurious. This, however, is true in a certain degree, of everything I eat and drink (except tea). After the smallest meal I am for a while less active mentally. A single glass even of claret I believe

injures my power of thinking; but accepting the necessity of regular meals, I do not find that a sparing allowance of light wine adds to the subsequent dulness of mind, and I am disposed to think it is of some slight use physically. From one to two and a half *small* wine glasses of claret or burgundy is the limit of what I can take—and that only at dinner—without conscious harm. One glass of sherry or port I find every way injurious. Whisky and brandy are to me simply poisons, destroying my power of enjoyment and of thought. Ale I can only drink when very much in the open air. As to tobacco, I have never smoked much, but I can either not smoke, as at present, or go to the limit of two small cigarettes in twenty-four hours. Any good effects of tobacco become with me uncertain in proportion to the frequency of smoking. The good effects are those commonly ascribed to it: it seems to soothe away small worries, and to restore little irritating incidents to their true proportions. On a few occasions I have thought it gave me a mental fillip, and enabled me to start with work I had been pausing over; and it nearly always has the power to produce a pleasant, and perhaps wholesome, retardation of thought—a half unthinking reverie, if one adapts surrounding circumstances to encourage this mood. The only sure brain stimulants with

me are plenty of fresh air and tea; but each of these in large quantity produces a kind of intoxication: the intoxication of a great amount of air causing wakefulness, with a delightful confusion of spirits, without the capacity of steady thought; tea intoxication unsettles and enfeebles my will; but then a great dose of tea often does get good work out of me (though I may pay for it afterwards), while alcohol renders all mental work impossible. I have been accustomed to make the effects of tea and wine a mode of separating two types of constitution. I have an artist friend whose brain is livelier after a bottle of Carlowitz, which would stifle my mind, and to him my strong cup of tea would be poison. We are both, I think, of nervous organization, but how differentiated I cannot tell. My pulse goes always rather too quickly; a little emotional disturbance sets it going at an absurdly rapid rate for hours, and extreme physical fatigue follows. My conviction is that no one rule applies to all men, but for men like me alcohol is certainly not necessary, and at best of little use. I have a kindlier feeling towards tobacco, though I am only occasionally a smoker.

P.S.—Since writing the above, I have asked two friends (each an intellectual worker of extraordinary energy) how alcohol affects them. Both agreed that

a large dose of alcohol stimulated them *intellectually*, but that the subsequent *physical* results were injurious.

E. Dowden.

March 3, 1882.

Professor EDISON.

I think chewing tobacco acts as a good stimulant upon anyone engaged in laborious brain work. Smoking, although pleasant, is too violent in its action; and the same remark applies to alcoholic liquors. I am inclined to think that it is better for intellectual workers to perform their labours at night, as after a very long experience of night work, I find my brain is in better condition at that time, especially for experimental work, and when so engaged I almost invariably chew tobacco as a stimulant.

Thos. A. Edison.

April 4, 1882.

Mr. ALEX. J. ELLIS, F.R.S., F.S.A.,

President of the Philological Society.

I am 67¾. I never took tobacco in any shape or form. For twenty-five years I have taken no sort of stimulant, not even tea or coffee. But for eight years in and amongst these twenty-five, but not part of them, I took a little wine. This is eight years ago. I did not find wine increased my power of work. I have led a working literary life, always occupied, except when obliged to rest from over work. The longest of these rests was three years, from 1849, while I was still drinking wine. It is possible that wine may whip one up a bit for a moment, but I don't believe in it as a necessity. I am not a teetotaler or temperance man in any way, and my rejection of all stimulants (my strongest drink being milk and much water) is a mere matter of taste.

A. J. Ellis.

February 22, 1882.

Professor EVERETT.

In reply to your letter, I have to say that I think all stimulants, whether in the form of alcoholic drinks, tea or coffee, or tobacco, should be very moderately used. For my own part, I have never smoked or snuffed, and my daily allowance of alcoholic drinks is a so-called pint bottle of beer or two glasses of wine. I have more frequently suffered from nervous excitability due to tea or coffee, than from any other kind of stimulant. I can compose best when my brain is coolest and my digestion easiest. I do not believe in artificial stimulus to literary effort.

J. D. Everett.

February 22, 1882.

Professor R. M. FAIRBAIRN,

Chairman of the Congregational Union of England and Wales.

I cannot say anything as to the effects of tobacco and alcohol upon the health. I never use either, and so can only say that in my case work has been done

without their help. In the absence of data for comparison as to the effects of indulgence and abstinence, it would be foolish in me to express any comparative judgment; but it is only fair to say that so far as I am capable of forming any opinion on the matter, the abstinence has been altogether beneficial.

R. M. FAIRBAIRN.

February 16, 1882.

MR. R. E. FRANCILLON.

It so happens that your question belongs to a class of topics in which I have taken much theoretical interest. For my *general* views, I cannot do better than refer you to a paper of mine in the *Gentleman's Magazine* of March, 1875, called "The Physiology of Authorship;" but I fully agree with you that the settlement of the question can only depend upon the collection of individual experience. I have consciously studied my own, and can state it shortly and plainly. I am a very hard, very regular, and not seldom an excessive worker; and I find that my consumption of tobacco,

and my production of work are in almost exact proportion. I cannot pretend to guess whether the work demands the tobacco or whether the tobacco stimulates the work; but in my case they are inextricably and, I believe, necessarily combined. When I take a holiday, especially if I spend it in the open air, I scarcely smoke at all; indeed, I find that bodily exercise requires no stimulant of any kind whatever. If I read, I smoke little; but if I produce, tobacco takes the form of a necessity, I believe—for I am indolent by *nature*, and tobacco seems to me to be the best machine for making work go with the grain that I can find.* I have a very strong suspicion that if I did not smoke (which I find harmless) I should have to conquer really dangerous temptations. As things are, though I am a very moderate wine-drinker (spirits I never touch, and

* The wisdom of occasionally using these various stimulants for intellectual purposes is proved by a single consideration. Each of us has a little cleverness and a great deal of sluggish stupidity. There are certain occasions when we absolutely need the little cleverness that we possess. The orator needs it when he speaks, the poet when he versifies, but neither cares how stupid he may become when the oration is delivered and the lyric set down on paper. The stimulant serves to bring out the talent when it is wanted, like the wind in the pipes of an organ. "What will it matter if I am even a little duller afterwards?" says the genius; "I can afford to be dull when I have done." But the truth still remains that there are stimulants and stimulants. Not the nectar of the gods themselves were worth the dash of a wave upon the beach, and the pure cool air of the morning.—Philip G. Hamerton, in *Intellectual Life*, p. 21.

abhor), alcohol, practically speaking, bears no appreciable part in my life's economy. I believe that to some people tobacco is downright poison ; to some, life and health ; to the vast majority, including myself, neither one thing nor the other, but simply a comfort or an instrument, or a mere nothing, according to indiosyncrasy.

My general theory is, that *bodily* labour and exercise need no stimulant at all, or at most very little ; but that intellectual, and especially creative, work, when it draws upon the mind beyond a quickly reached point, requires—being a non-natural condition—non-natural means to keep it going. I cannot call to mind a single case, except that of Göethe, where great mental labour has been carried on without external support of some sort ; which seems to imply an instinctive knowledge of how to get more out of the brain machine than is possible under normal conditions. Of course the means must differ more or less in each individual case ; and sometimes the owner of a creative brain must decide whether he will let it lie fallow for health's sake, or whether for work's sake he will let life and health go. I always insist very strongly upon brain work—beyond an uncertain point—being *non-natural*, and, therefore, requiring non-natural conditions for its exercise.

I can quite believe the feat of the Hungarian officer* would be impossible to a man who smoked or drank. But I cannot at all believe in that officer's powers of writing, instead of swimming, with a mind at full stretch, for the half of eleven hours. As to economy, tobacco costs me a good deal; but I look upon it as the investment of so much capital, bearing better interest than any other investment could bear.

R. E. Francillon.

April 4, 1882.

*The surprising endurance of the Hungarian officer, who lately swam a lake in Hungary, a distance of eleven miles, is ascribed to his abstinence from alcohol and tobacco.—*Thrift*, for February, 1882.

Mr. EDWARD A. FREEMAN, D.C.L., LL.D.

I can tell you nothing of the effects of smoking tobacco, having had no experience. I tried once or twice when young, but, finding it nasty, I did not try again. *Why* people smoke, I have no notion. If I am tired of work, a short sleep sets me up again. I really have nothing to say about alcohol—I have never thought about it. I drink wine like other people, and

I find brandy an excellent medicine on occasion. I used to drink beer, but some of the doctors say it is not good for me, and some have recommended whisky instead; but I really have no views on the subject. I have drunk wine and beer, as I have eaten beef and mutton, without any theories one way or another.

E. A. FREEMAN.

October 29, 1882.

MR. F. J. FURNIVALL, M.A.

Though I have no claim to be considered as one of the great thinkers and popular authors, I am a small thinker and a decidedly *un*popular author, who has nevertheless done some work, I answer, that I have been a teetotaler since the summer of 1841, when I was 16, and I have never smoked except as a lark at school. I was a Vegetarian for about 25 years. I believe alcohol to be highly detrimental to head work. Tobacco has, I think, done good in only one case that has come under my notice during 40 years; it quieted an excitable man. My father, who was a medical man

of wide practice, was very strong against much use of tobacco. He knew two cases of speedy death from the oil in the bowl of a tobacco-pipe being applied to aching teeth. He had several cases of much impaired digestion from smoking.

F. J. Furnivall.

March 8, 1882.

Mr. SAMUEL R. GARDINER, Hon. L.L.D.

Professor of Modern History in King's College.

In reply to your letter, I beg to say that I never smoked in my life, and don't intend to begin. I take beer at luncheon and dinner, and occasionally a glass or two of wine, but very often I am four or five days without doing that.

Samuel R. Gardiner.

March 9, 1882.

Rt. Hon. W. E. GLADSTONE, M.P.

In answer to your questions, I beg to say that Mr. Gladstone drinks one glass or two of claret at luncheon, the same at dinner, with the addition of a glass of light port. The use of wine to this extent is especially necessary to him at the time of greatest intellectual exertion. Smoking he detests, and he has always abstained from the use of very strong and fiery stimulants.

Herbert J. Gladstone.

November 29, 1882.

Mdlle. H. GREVILLE.

Being a lady, though my *nom de plume* be a man's, I have little experience of either alcohol or tobacco. I must fairly say that though claret agrees with my constitution when properly mixed with water, wine without water, and every kind of liqueurs, makes me very ill, especially when taken between my meals, which are only two in number—breakfast at twelve, and dinner at seven. I never use any stimulant. My sleep being

scanty, I want sedatives rather than stimulants. I must add, nevertheless, that once or twice in a year, when I felt very tired, and had some work to conclude, especially at night, I happened to smoke one cigarette or Russian papyrus, which revived me promptly, and enabled me to finish my work. If you may be interested in my fashion of working, I may inform you that I work very fast, two hours at once, and then take a rest, or dinner. After resting two hours, I can write two hours again. I write without scratching, or blotting, about 100 lines of any French newspaper feuilleton, not the *Temps*, which is larger, but the *Figaro*, or any similar paper, in half-an-hour's time. I don't think that anybody could write more quickly; I seldom make any corrections, and never copy my work, which is sent to the printer as I write it. I use no stimulants of any kind, but sometimes eat an orange or two. After working towards midnight, I sometimes feel hungry, but I never eat for fear of spoiling my night's rest. I lived many years in Russia, and my experience is, that people who smoke too much suffer from their throat. Emile Augrèr has been very ill with his stomach, from smoking too many strong cigars. He ceased, and has been completely healed.

H. GREVILLE.

April 28, 1882.

Count GUBERNATIS.

In reply to your favour of the 28th ult., I have the honour to inform you that *I do not smoke*, because nicotine acts upon my system as a most powerful poison. At the age of ten I had a Havana cigar given me to smoke; after smoking it I fainted and did not come to myself till after a *deep sleep, which lasted twenty-four hours*. When I was twenty, the third part of a cigar was given me to smoke as a remedy for the tooth-ache. I could not finish it. A cold perspiration attended with vomiting and fainting ensued. I therefore judge from the effects of tobacco upon myself that it cannot be such a benefactor of mankind as people have tried to make it out. I am convinced that in any case, smoking lulls the mind to sleep, and when carried to excess tends to produce stupefaction or idiotcy.

Perhaps you are aware that in Little Russia, the people call tobacco the *Devil's herb*; and it is related that the devil planted it under the form of an idolater. For my part I am quite prepared to adopt the opinion of the Russian people. Before the time of Peter the Great, smoking was strictly prohibited in Russia.

The Poet Prati sang one day:

Fuma, passagia e medita
E diverrai poeta.

(Smoke. ramble alone and think, and thou will soon become a poet.)

That is what he himself does, but my belief is that owing to the abuse of cigars, he so frequently raves (dotes) and his poetry is often cloudy.

As for alcohol, I take it to be proved beyond all doubt, that when taken in very small quantities it may, in certain cases, do good, but that taken in large quantities it kills. After having burnt the stomach, it deprives it of its power of digestion. I have seen a great many persons begin to use alcoholic beverages in the hope of acquiring tone, and afterwards get so accustomed to their use, that the best Chianti wine passed into their stomach like water. In this case, as in so many other cases, it is a question of measure. Alcohol has a like injurious effect upon the brain as upon the stomach.

I am by no means an authority on the question which you have been good enough to address to me, and can therefore only give you briefly a statement of my own personal experience. Speaking of stimulants, I would mention, for instance, the strange effect produced upon my rather sensitive organism by a single cup of coffee. If I take a cup of coffee at six o'clock in the evening I cannot get to sleep before six in the

morning. If I take it at noon I can get to sleep at midnight. I know that many people take coffee to keep awake when working through the night. My own opinion is that you cannot work any better with these stimulants. There is a sort of irritation produced by drinking coffee which I do not consider helpful to serious and sustained work. It is possible, however, that works of genius may be produced sometimes in a state of nervous excitement, I suppose when the shattered nerves begin to relax. Manzoni wrote his master pieces when in a state of painful nervous distraction, but alcohol had nothing to do with it; perhaps he had recourse to other stimulants.

(1) When we read that literary producers of any power have gone on working up to the last, even in the near approach of death, we usually find the work done has been of a not unwelcome kind, and often that it has formed part of a long-cherished design. But when the disease of which the sufferer is dying is consumption, or some disease which between paroxysms of pain leaves spaces of ease and rest, it is nothing wonderful that work should be done. Some of the best of Paley's works were produced under such conditions, and some of the best of Shelley's. Nor, indeed, is there anything in mere pain which necessarily prevents literary work. The late Mr. T. T. Lynch produced some of his most beautiful writings amid spasms of *angina pectoris*. This required high moral courage in the writer . . . . It is a curious, though well-known fact, however, that times of illness, when the eyes swim and the hand shakes, are oftentimes rich in suggestion. If the mind is naturally fertile—if there is stuff in it—the hours of illness are by no means wasted. It is then that the "*dreaming* power" which counts for so much in literary work often asserts itself most usefully.—*The Contemporary Review*, vol. 29, p. 946.

(2) When the poet Wordsworth was engaged in composing the "White Doe of Rylstone," he received a wound in his foot, and he observed that the continuation of his literary labours increased the irritation of the wound; whereas by suspending his work he could diminish it, and absolute mental rest produced perfect cure. In connection with this incident he remarked that poetic excitement, accompanied by protracted labour in composition, always brought on more or less of bodily derangement. He preserved himself from permanently injurious consequences by his excellent habit of life.—Hamerton. *The Intellectual Life.*

I know that certain authors think they can write better when taking artificial stimulants. I do not, however, believe that an artificial irritation of the nerves can have any good effect upon our faculty of apprehension. I am even inclined to think that when we write best, *it is not owing to nervous excitement*, but rather because our nerves, after a period of extreme irritation, *leave us a few moments respite*, and it is during these moments the divine spark shines brightly. When creative genius has accomplished its task, the nerves once more relapse into their former irritability and cause us to suffer; but at the time of creation there is a truce of suffering.

I never use any stimulant to help me in my labours; yet when I have been writing works of fiction, for instance my Indian and Roman Plays, I have nearly always been subject to great nervous agitation. When I suffered most from spasms, I had short intervals of freedom from pain, during which I could write, and

those around me asked in astonishment how I could, in the midst of such suffering, write scenes that were cheerful, glowing and impassioned.

I have occasionally in my time enjoyed these luminous intervals. I do not know whether those who use alcohol as a stimulant have experienced the same. No doubt they have succeeded in exciting their nervous sensibilities; but I assert that the real work of creative genius is accomplished in the intervals of this purturbation of the nerves which by some is deemed so essential to intellectual labour. When the nerves are excited to the highest pitch, they occasionally suffer, the transitory cessation from which is the divine moment of human creation. It seems to me, however, that this ought to be left to nature, and that every attempt to produce artificial excitement, for the purpose of producing creations of a higher class, is futile and beset with danger.

ANGELO DE GUBERNATIS.

March 4, 1882.

M. L. P. GUÉNIN,

Revising Stenographer to the French Senate.

I thank you for having asked my opinion upon the effects of tobacco and alcohol on the mind and the health of men who give themselves up to intellectual work; and hasten to comply with your request. I am not a very resolute adversary of tobacco, because I must admit that I smoke, and at home use wine also: but if their use appears useful or agreeable, I ought to add that whenever I have to undertake any long arduous work, and above all, the reproduction of stenographic law or parliamentary reports, of which the copy is required without delay, I then make use of nothing but pure water. I limit myself as to stimulant to the use of coffee, which enables me to pass whole days and nights without feeling any want of sleep and, so to say, without fatigue, notwithstanding the labour of the stenographic translations. As you see, I consider that tobacco and alcohol do not act as stimulants, but rather as narcotics. With me they induce after the first moment of excitement a sort of calm and somnolence altogether incompatible with severe work; and I prefer coffee, always on the condition that as

soon as the effort to be accomplished is finished the use of it must cease. I will not invoke the precedents of the celebrated men who have been led to make great use of coffee without impairing their health. It is after many years' experience that I have acted as I have indicated.

L. P. Guénin.

March 11, 1882.

Dr. WILLIAM GUY.

In answer to your enquiry, I may state the result of my personal experience and observation thus:—1. Alcoholic liquors, when taken in such quantity as to excite the circulation, are unfavourable to all inquiries requiring care and accuracy, but not unfavourable to efforts of the imagination. 2. Tobacco taken in small quantities is not unwholesome in its action on mind or body. When taken in excess it is not easy to define or describe its action, the chief fact relating to it being that it increases the number of the pulse, but lessens the force of the heart. 3. My personal experience of

such quantities of wine as two or more glasses of port a day at my age (72) is that it produces no perceptible or measurable effect when taken for, say, three weeks or a month at a time, when compared with the like period of total abstinence. 4. It may be said in favour of temperance or even of extreme abstinence, that some of those men who have done most work in their day—John Howard, Wesley, and Cobbett, for example—have been either very moderate, or decidedly abstemious. But on the other hand, such men as Samuel Johnson, who was a free liver and glutton, and Thackeray, who drank to excess, have also got through a great amount of work.

WILLIAM A. GUY.

Feb. 25, 1882.

PROFESSOR ERNST HAECKEL,

JENA.

I find strong coffee very useful in mental work. Of alcohol, I take very little, because I find it of no value as a stimulant. I have never smoked.

E. HAECKEL.

November 4, 1882.

Mr. PHILIP GILBERT HAMERTON.

I am quite willing to answer your question about tobacco. I used to smoke in moderation, but six years ago, some young friends were staying at my house, and they led me into smoking more in the evenings than I was accustomed to. This brought on disturbed nights and dull mornings; so I gave up smoking altogether—as an experiment—for six months. At the end of that time, I found my general health so much improved, that I determined to make abstinence a permanent rule, and have stuck to my determination ever since, with decided benefit. I shall certainly never resume smoking. I never use any stimulants whatever when writing, and believe the use of them to be most pernicious; indeed, I have seen terrible results from them. When a writer feels dull, the best stimulant is fresh air. Victor Hugo makes a good fire before writing, and then opens the window. I have often found temporary dulness removed by taking a turn out of doors, or simply by adopting Victor Hugo's plan. I am not a teetotaler, though at various times I have abstained altogether from alcoholic stimulants for considerable periods, feeling better without them. I drink ale to lunch, and wine (Burgundy) to dinner; but

never use either between meals, when at home and at work. At one time I did myself harm by drinking tea, but have quite given up both tea and coffee. My breakfast in the morning is a basin of soup, invariably, and nothing else. This is very unusual in England, but not uncommon in France. I find it excellent, as it supports me well through the morning, without any excitement. My notion of the perfect physical condition for intellectual work is that in which the body is well supported without any kind of stimulus to the nervous system. Thanks to the observance of a few simple rules, I enjoy very regular health, with great equality and regularity of working power, so that I get through a great deal without feeling it to be any burden upon me, which is the right state. I never do any brain work after dinner; I dine at seven, and read after, but only in languages that I can read without any trouble, and about subjects that I can read without any trouble, and about subjects that are familiar to me.

P. G. Hamerton.

February 13, 1882.

Mr. THOMAS HARDY.

I fear that the information I can give on the effect of tobacco will be less than little: for I have never smoked a pipeful in my life, nor a cigar. My impression is that its use would be very injurious in my case; and so far as I have observed, it is far from beneficial to any literary man. There are, unquestionably, writers who smoke with impunity, but this seems to be owing to the counterbalancing effect of some accident in their lives or constitutions, on which few others could calculate. I have never found alcohol helfpful to novel-writing in any degree. My experience goes to prove that the effect of wine, taken as a preliminary to imaginative work, is to blind the writer to the quality of what he produces rather than to raise its quality. When walking much out of doors, and particularly when on Continental rambles, I occasionally drink a glass or two of claret or mild ale. The German beers seem really beneficial at these times of exertion, which (as wine seems otherwise) may be owing to some alimentary qualities they possess, apart from their stimulating property. With these rare exceptions, I have taken no alcoholic liquor for the last two years.

T. Hardy.

Dec. 5, 1882.

Mr. FREDERIC HARRISON.

Frederick Harrison never has touched tobacco in any form, though much in the society of habitual smokers, but finds many hours in a close smoking room rather depressing. Has always taken a moderate amount of alcohol (pint of claret) *once* in the day, and finds himself rather stronger with than without it. Age fifty, health perfect; accustomed to much open-air exercise, long sleep, and little food. Reads and writes from eight to ten hours per diem, and never remembers to have been a day unfit for work.

March 1, 1882.

Mr. G. A. HENTY.

In answer to your question, certainly in my own case I should find stimulants destructive to good work. I get through an immense deal of literary work in the course of the day. I rise at eight, and seldom put out my light until three in the morning. With lunch and

dinner I drink claret and water, and never touch stimulants of any kind except at meals. On the other hand, I smoke from the time I have finished breakfast until I go to bed, and should find it very difficult to write unless smoking. I have a great circle of literary friends, and scarce but one smokes while he works. Some take stimulants—such as brandy and soda water—while at work; some do not, but certainly nineteen out of twenty smoke. I beleve that smoking, if not begun until after the age of twenty-one, to be in the vast majority of cases advantageous alike to health, temper, and intellect; for I do not think that it is in any way deleterious to the health, while it certainly aids in keeping away infectious diseases, malaria, fever, &c.

While I consider a moderate use of wine and beer advantageous—except, of course, where beer, as is often the case, affects the liver, I regard the use of spirits as wholly deleterious, except when medically required, and should like to see the tax upon spirits raised tenfold. A glass of spirits and water may do no harm, but there is such a tendency upon the part of those who use them to increase the dose, and the end is, in that case, destruction to mind and body.

G. A. Henty.

February 22, 1882.

prefers an entirely undisturbed and unclouded brain for mental work, unstimulated by anything stronger than tea or coffee, unaffected by tobacco or other drugs. His faculties are best under his control in the forenoon, between breakfast and lunch. The only intellectual use he could find in stimulants is the quickened mental action they induce when taken in company. He thinks ideas may reach the brain when slightly stimulated, which remain after the stimulus has ceased to disturb its rhythms. He does not habitually use any drink stronger than water. He has no peremptory rule, having no temptation to indulgence, but approaching near to abstinence as he grows older. He does not believe that any stimulus is of advantage to a healthy student, unless now and then socially, in the intervals of mental labour.

Mr. GEORGE JACOB HOLYOAKE.

I never took enough of stimulants to tell whether it is good or ill for "thinking and working." Tobacco is only good when you have a habit of working too much, as it makes you lazy-minded.

G. J. Holyoake.

April 3, 1882.

Sir J. D. HOOKER, F.R.S.

I have had no experience on the subject of the use of tobacco and alcohol that is of any value, or you should be welcome to it.

Jos. D. Hooker.

Feb. 13, 1882.

Mr. W. D. HOWELLS.

If you will allow me to count myself out of the list of "great thinkers" and *very* "popular authors," I will gladly contribute my experience in the points you publish. I never use tobacco, except in a very rare, self-defensive cigarette, where a great many other people are smoking; and I commonly drink water at dinner. When I take wine, I think it weakens my work, and my working force the next morning.

W. D. Howells.

March 2, 1882.

Dr. J. P. JOULE.

I am afraid that my experience can be of little use to you, because I have lived a very uniform life, and am therefore unable to compare the consequences from following various *régimes*. I use alcoholic beverages moderately. I do not think they ever assisted or retarded my mental work. As for tobacco, it is the object of my aversion, as it must be to all non-smokers

to whom the habits of the consumers of the weed must always appear more or less as an impertinence. Besides, it is difficult to imagine how the use of narcotics can be indulged in with impunity to the health.

J. P. JOULE.

February 11, 1882.

THE REV. HENRY LANSDELL.

In reply to your note, I beg to say—1st, that I have never been a smoker. 2nd, that I became a total abstainer from alcoholic liquors before I had attained the age of twenty. 3rd, that I have never kept my bed, I am thankful to say, for a day, in my life. 4th, that up to the age of twenty-four I rose at seven; and up to the age of twenty-seven, at six; since twenty-seven, at five a.m. 5th, that it is a common occurrence for me to have been (for some years past) at mental employment from six a.m., to seven p.m. 6th, that I do not find the least necessity for stimulants in the form either of tobacco or of alcohol.

HENRY LANSDELL.

March 13, 1882.

Rev. STANLEY LEATHES, D.D.

I am not an habitual smoker, and therefore cannot speak about its effects; I find it an irritant rather than a sedative. But I am quite sensible of the virtue of an occasional glass of good wine, and am certain I can work better with than without it.

Stanley Leathes.

April 15, 1882.

W. E. H. LECKY.

I am not a smoker, and am therefore unable to give you any evidence on the subject.

W. E. H. Lecky.

February 7, 1882.

Dr. F. R. LEES.

I have travelled in various parts of the world, from Greece to the Pacific, and from the Coasts of Labrador to the Southern States of North America, perhaps as much as any man living, and have never, in heat or cold, felt any inconvenience from my forty-eight years of abstinence. I have lectured for many nights consecutively on various topics during the intervals of that time, and have written thousands of articles on philosophy, temperance, physiology, politics and criticisms in papers and magazines, and published pamphlets and volumes equal to 25 octavos of small print; but have never required anything stronger than tea or coffee as a stimulant. The Alliance *Prize Essay* (100 guineas) of 320 pages was composed and written in 21 days. I never smoke, snuff, or chew. I have known *many* literary men ruined by smoking, and in all cases the continued use of tobacco is most injurious to the mind, as well as to the body. It *slays* the nervous recuperative energy.

F. R. Lees.

November 17, 1882.

Mr. LEONE LEVI, F.S.A.,

Barrister-at-Law,

Professor of the Principles and Practice of Commerce and Commercial Law, King's College, London.

I have no hesitation in saying that I have never found the need of either tobacco or alcohol, or any other stimulants, for my intellectual efforts. I have never used tobacco in any form, and though occasionally, when my physical forces are much exhausted, I have derived benefit from a single glass of wine or ale, as a rule, and in my ordinary diet, I use nothing whatever but fresh water. This is my personal experience, and though I have worked very hard—often sixteen hours a day of continuous labour—I have always enjoyed, thanks to Providence, the best of health.

Leone Levi.

Sir JOHN LUBBOCK, Bart. M.P.

I beg to say that in my opinion the use of tobacco is, in the great majority of cases, prejudicial. As to alcohol, I would rather not express any opinion.

John Lubbock.

February 17, 1882.

Professor MAGNUS.

In reply to your enquiry respecting the use of tobacco and alcohol, I shall be glad to give you all the information I possess on this subject; though, of course, I am not in a position to judge whether my few remarks will be of any service to you.

In the first place, as regards the influence of tobacco and alcohol upon the health in general, it is clearly ascertained that under certain circumstances, it may become highly injurious.

Apart from the disturbance produced in the whole nervous system, there are serious diseases affecting certain organs of the body, which arise solely from the

abuse of both these stimulants. We note a serious affection of the visual organs, which we plainly designate by the name of: "Emblyopia ex abusu nicotiano et alcoholico." The symptoms of this complaint consist chiefly in a gradual and steady decline of the power of sight, coupled with partial colour blindness. I cannot here enter into details as to the manner in which the range of sight is affected as regards each of the different colours, and can only refer to the characteristic weakening of the power to distinguish red from other hues.

It will not be necessary, I presume, to extend my remarks to the evil effects of tobacco and alcohol upon the human body, as you are sufficiently acquainted with them, especially as far as alcohol is concerned.

Now as to the relation in which both stand to mental work. If I may be allowed to state first of all the result of observations in my own case, I must tell you that I have not found these drugs to be in any degree helpful in the performance of mental labour. I find it absolutely impossible to put any sensible thoughts on paper when I am smoking. In former years I frequently tried to smoke a pipe or a cigar over my work, but had always to give it up; I only got into proper working condition after putting tobacco aside. Indeed, of late

years I have felt a growing antipathy to tobacco, so that, whilst I was formerly passionately fond of smoking, I now, very rarely, indeed, indulge in the practice.

My experience with regard to alcohol is precisely similar. I am very fond of a little beer, but not when at work. The current of my thoughts flows much more clearly and rapidly when I have had no drink. I have a special aversion for wine, which, indeed, I do not drink at all. Generally speaking, I can therefore say, that, in my own case, tobacco and alcohol have a disturbing effect, when doing mental work. This you will, of course, take as applying to myself alone. I know some very respectable scholars in this town and neighbourhood who are only capable of thinking and working properly when under the influence of tobacco.

MAGNUS.

Breslau, February 28, 1882.

MR. EDWARD MAITLAND, B.A.

In reply to your enquiries, I have to say that my experience of the effects of alcohol and tobacco upon

intellectual work is a very limited one, owing to the very moderate use I have made of either. So far, however, as my experience goes, my conclusions are as follows: tobacco, though it may, indeed, give a momentary fillip to the faculties, lessens their power of endurance; for by lowering the action of the heart, it diminishes the blood supply to the brain, leaving it imperfectly nourished, and flaccid, and unable, therefore, to make due response to the demands of its owner, the man within, who seeks to manifest himself through the organism. Of an organism thus affected, as of an underpitched musical instrument, the tones will be flat. Of stimulants, the effect is the contrary. Owing to the over-tension of the strings, the music will be sharp. It is apt also to be irregular and discordant, owing to the action set up in the organism itself—an action which is not that of the performer or man. That which alone ought to find expression, is the central, informing spirit of the individual; and for both idea and expression to be perfect, the first essential is purity, mental as well as physical. Hence, however great a man and his work may be, under the influence of alcohol or tobacco, or on a diet of flesh, they would be still greater on pure natural regimen. Of course, there are cases in abundance in which persons have

become so depraved by evil habits, as to be utterly incapacitated through the disuse of that to which they have been accustomed. But no sound argument in favour of the abuse can be founded on this.

EDWARD MAITLAND.

March 20, 1882.

SIR THEODORE MARTIN, K.C.B.

To myself tobacco is simply poison, and I believe it is so to very many who use it. I have seen proofs that it is so among the friends of my youth, who certainly hurt their health and shortened their lives by smoking. But, on the other hand, I have known others who smoked with impunity, and even with benefit to their nervous system. These, however, are, in my experience, exceptional cases. Wine in moderation is, I am sure, beneficial to brain workers; and I feel confident that it is far better, as a rule, to assist the system by this, than by food without wine or alcohol, which, in my experience, seems always to lead to eating to an extent that is very apt to cause derangement of the functions of the

body. But, really, I have not made my observations either with such care or on so wide a scale as to give them any value.

THEODORE MARTIN.

February 18, 1882.

THE REV. JAMES MARTINEAU, D.D.

Having kept no record of my dietary and health, I can give you no more exact report than my memory supplies. Of tobacco, I have nothing to say, except that my intense dislike of it has restricted my travelling to a minimum, and kept me from all public places where I am liable to encounter its sickening effects. My first prolonged experience of abstinence from wine and malt liquor ran through about seven years, dating, I think, from 1842. The change was not great in itself, and I always thought it favourable in its effects. At no time of my life did I sustain a heavier pressure of work and of anxiety. But in the spring of 1849, when I was living with my family in Germany, I fell into a low state of health, indicated by fluttering circulation in going upstairs, or up-hill; and, under medical advice,

I adopted the habit of taking, daily, I suppose about half-a-pint bottle of *Vin ordinaire*. I recovered completely, and adhered for several years to the allowance (or its equivalent) which had been prescribed to me. Under this regimen, however, I became, after a time, subject to occasional slight attacks of gout, and to some disturbance of digestion and of sleep. In spite of medical advice, I determined to revert to the abstinence in which I had never lost faith. For a time of, I suppose, from twelve to fifteen years, I have persisted in this rule ; not, indeed, being under any vow, but practically not taking more than half-a-dozen glasses of wine per annum. During this time, I have escaped, apparently, all tendency to gouty affections ; have returned to untroubled sleep and digestion ; and, notwithstanding the advance of old age (I am now 77), have retained the power of mental application, with only this abatement perceptible to myself, that a given task requires a somewhat longer time than in fresher days. Though the sedentary life of a student is not very favourable to the maintenance of muscular vigour, it has not yet forbidden me the annual delight of reaching the chief summits of the Cairn Gorm mountains during my summer residence in Inverness. I will only add that I have never found the slightest difficulty, physical or

moral, in an instantaneous change of habit to complete abstinence. Instead of feeling any depressing want of what I had relinquished, I have found a direct refreshment and satisfaction in the simpler modes of life. Few things, I believe, do more, at a minimum of cost, to lighten the spirits and sweeten the temper of families and of society, than the repudiation of artificial indulgences.

JAMES MARTINEAU.

December 1, 1882.

DR. HENRY MAUDSLEY.

I don't consider alcohol or tobacco to be in the least necessary or beneficial to a person who is in good health; and I am of opinion that any supposed necessity of one or the other to the hardest and best mental or bodily work, by such a person, is purely fanciful. He will certainly do harder and sounder work without them. I am speaking, of course, of a person in health; by a person not in health they may be used properly, from time to time, as any other drug would be used.

HENRY MAUDSLEY.

February 13, 1882.

Sir THOMAS ERSKINE MAY, K.C.B., D.C.L.

In reply to your inquiries, I can give you my experience in a few words. I can offer no opinion as to the effects of tobacco, as I have never been a smoker. My experience of many years favours the view that moderation in food and drink is the great secret of physical health, mental activity and endurance. On several occasions while working twelve and fourteen hours a day, I tried total abstinence, but I found myself dyspeptic and stupid, and was obliged to resume my accustomed potations. I have found that any unusual amount of alcohol, while stimulating mental activity for a time, soon produced lassitude and sleepiness.

T. Erskine May.

February 23, 1882.

Rev. JOHN E. B. MAYOR, M.A.

Fellow of St. John's College, and Professor of Latin in the University of Cambridge.

When I was a school-boy of eight or nine, I was persuaded to buy some cigars and put one to my mouth for a moment. I threw it away, and have never touched tobacco since. I compute that I must have saved some £1500 by abstaining from this narcotic. My two brothers—one 3rd wrangler, the other 2nd classic—have also abstained for life. I know no indulgence which leads people to disregard the feelings of others so utterly as smoking does; nor can I believe a deadly poison can be habitually taken without great injury to the nerves. Alcohol I have not touched for more than two years, nor flesh meat, nor tea, nor coffee. All my life long I have had no difficulty in adopting any diet whatever; but I am sure that since I confined myself to fruits and farinacea, life has gone easier with me. No one ever heard me complain of the want of a dinner, or of the quality of what was set before me; but I now know that a day or two's fasting will do me no sort of harm,* and that whether I dine in hall with

*Twice in my life I have tried the experiment of a *strictly* vegetarian diet (*without milk, butter, eggs, fish or flesh*)—once when I was about

my brother fellows, or take two or three biscuits in my own room, makes no odds. I am more independent, and certainly more able to influence the habits of the poor than I was.

JOHN E. B. MAYOR.

March 2, 1882.

twelve years old, and again, for forty-eight days, beginning on the 25th June, 1878. I had been for some months taking regular exercise (a rare thing with me), walking out four miles every morning from six to seven, so that I was in rude health. I was just beginning a stiff piece of literary work on Juvenal, which involved the daily examination of several hundred passages of authors, chiefly Greek and Latin; and I wished to try how far vegetarian diet would enable me to resist the depressing influence of fasting. I mapped out my forty-eight days into four divisions of twelve each, intending (if all went well) to fast every other day for the first twelve; every third for the second; every fourth for the third; and every sixth for the last twelve. I thought it prudent to consult a doctor (a thing which I have scarcely ever had occasion to do), who bid me go to the prison to be weighed every two or three days, and to show myself to him twice a week. I did not quite carry out my scheme, but I did complete more than half—and the severer half—with no ill effects, fasting June 25, 27, 29, July 2, 5, 7, 10, 13, completing that is, two-thirds of my design for the first twelve days, and the whole of that for the second. I drank water freely on the fasting days, but ate nothing for a period varying from twenty-eight to about thirty-five hours. On the eating days, and for the remainder of the forty-eight, I lived on fruits, vegetables, or wholemeal biscuits or wheatmeal or oatmeal porridge. I never was more fiercely eager for work in my life, nor did my pulse give way, but I lost flesh rapidly, and had never much to spare. On the whole I lost 13lbs., and was advised by the doctor to stay there, as it is much easier to let yourself down than to pick up again. For years I have been striking off one luxury after another in my diet when alone, till at last I have come to dry bread (or biscuit or porridge) and water.—*Herald of Health, September, 1881.*

The ABBÉ MOIGNO.

I am grateful to you for thinking of me in your generous enquiry about the best conditions of literary and scientific composition. I can hardly offer myself as an example, because my constitution is rather too exceptional, but my experience may have some degree of usefulness. I have already published a hundred and fifty volumes, small and great. I scarcely ever leave my writing table. I never take a walk, nor recreation, even after meals; and yet have not felt any head-ache, constipation, or any derangement in the urinary organs. I have never had occasion to have recourse to stimulants, coffee, alcohol, tobacco, &c., in order to work, or to obtain clearness of mind. On the contrary, stimulants give rise in my case to abnormal vibrations in the brain, which are adverse to its quick and regular working.

Several times in my life I fell into the habit of taking snuff. It is a fatal habit, dirty to begin with, since it puts a cautery to the nose, filth in the pocket, is extremely unwholesome; for he who takes snuff finds his nose stopped up every morning, his breathing difficult, his voice harsh and snuffling, because the action of tobacco consists in drawing the humours to the brain;

fatal, at last, because the use of snuff weakens and destroys, by degrees, the memory. This last effect is fully proved by my own professional experiences, and that of many others.

I learned twelve foreign languages by the method I published in my "*Latin for all;*" that is to say, I draw up the catalogue of 1,500, or 1,800 radical or primitive simple words, and engraved them upon my mind by means of mnemonic formulas. In that way I had learned about 41,500 words, whose meaning is generally, or most frequently, without connection with the word itself, and from 10,000 to 12,000 historical facts, with their precise date. All this existed simultaneously in my mind, always at my disposal when I wanted the meaning of a word or the date of an event. If anyone asked me who was the twenty-fifth king of England, for instance, I saw in my brain that it was Edward, surnamed Plantagenet, who ascended the throne in 1154. With respect to philology or chronology, I was the most extraordinary man of my time, and Francis Arago jokingly threatened to have me burnt like a wizard. But I had again fallen into the practice of snuff-taking during a stay of some weeks in Munich, where I spent my evenings in a smoking room with the learned Bavarians, each of whom ate four or five meals

a day, and drank two or three jugs of beer. The most illustrious of these learned men, Steinhein, boasted of smoking 6,000 cigars a year. I attained to smoking three or four cigars a day. While drawing up my treatise on the Calculus of Variations, the most difficult of my mathematical treatises, I unconsciously emptied my snuff-box, which contained twenty-five grammes (nearly an ounce) of snuff; and one day I was painfully surprised to find that I was obliged to have recourse to my dictionary for the meaning of foreign words. I found that the dates of the numerous facts I had learnt by heart had fallen from my mind. Such a thing has rarely or seldom happened before. Distressed at this sorrowful decay of my memory, I made an heroic resolution, which nothing has disturbed since. On the 1st of August, 1863, I smoked three cigars and used twenty-five centimes (2½d.) worth of snuff; from the following day to June, 1882, I have neither taken a pinch of snuff nor smoked a single cigarette.

It was for me a complete resurrection, not only of memory, but of general health and well-being. It was only necessary for me to do, what I did eighteen years later, to lessen nearly one-half the quantity of food which I took every day, to eat less meat and more vegetables, to obtain such incomparable health, of

which it is hardly possible to form any idea, unlimited capacity of labour, perfect digestion, absence of wrinkles, pimples ; and I beg leave to affirm that those who tread in my footsteps will be as sound as I am. Add to this the habit, irrevocably established, of never saying, I *shall* do, nor I *am* doing, but I *have done*, and you have the secret of the enormous amount of work I have been able to accomplish, and am accomplishing every day, in spite of my eighty years. Nobody will dispute me the honour of being the greatest hard-working man of my century.

I ought, finally, to add that I find it well for me to take at breakfast a small half-cup of coffee without milk, to which, when only two or three teaspoonful remain at the bottom of the cup, I add a small spoonful of brandy, or other alcoholic liquor. That is my whole allowance of stimulants. How happy would those be who should adopt my *régime*. They would be able, without harm, to sit at their desk immediately after breakfast, and to stay there till dinner-time. No sooner would they be in bed, at about nine o'clock, but they would be softly asleep a few minutes later, and could rise at five in the morning, full of strength, after a nourishing sleep of eight hours.

Abbe F. Moigno.

July 20, 1882.

Rev. J. MORRISON, D.D.,

Principal of the Evangelical Union College.

For my kind of work, I have found it absolutely necessary to abstain altogether from the use of both alcohol and tobacco.

J. Morrison.

May 11, 1882.

Mr. AUGUSTUS MONGREDIEN.

I am 75 years of age. I have smoked moderately all my life; and for the last fifty years have never, except in rare and short instances of illness, retired to bed without one tumbler of whiskey toddy. You will therefore see that I am utterly incompetent to pronounce on the respective effects, on the mind and body, of moderate indulgence, and of total abstinence, for I have never tried the latter.

A. Mongredien.

March 10, 1882.

Dr. J. A. H. MURRAY,

Ex-President of the Philological Society, and Editor of its English Etymological and Historical Dictionary.

I use no stimulants of any kind, and should be very sorry to do so. I thought it was now generally admitted that the more work a man has to do, the less he can afford to muddle himself in any way. But as I have never tried the experiment in using either alcohol or tobacco, and cannot afford to do it, I have no comparative experience to offer. It might be beneficial; I do not believe it would, and prefer not to risk the chance. *Fiat experimentum in corpore viliore.*

J. A. H. Murray.

March 2, 1882.

Mr. D. CHRISTIE MURRAY.

I should have thought that the universal experience of mankind had already been set on record without much ambiguity. It has been my practice to smoke at work, and I do not think I could get along without

tobacco now, unless I made an effort, the profit of which could scarcely justify the pains. As a matter of nature, I do not believe that a man works either better or worse for the use of tobacco, unless he smokes so much as to injure his general health. Alcoholic drinks are, of course, mentally as well as physically stimulative, and I have found them useful at a pinch. But everybody knows that stimulants are reactionary, and it is pretty certain that in the end they take more out of a man than they put into him. Under extraordinary pressure they have their uses, but their habitual employment muddles the faculties, and the last state of the man who constantly works on them is worse than the first. Continually taken alone, and as a stimulant to mental exertion, their influences on a man of average formation are fatal. But I should have thought all these things settled long ago, unless it were in junior debating societies.

D. Christie Murray.

April 11, 1882.

Professor NEWMAN.

In boyhood, I perceived that to my younger sisters mere drops of wine caused coughing and spitting, and the heat of wine to my own palate and throat was offensive. Beer, ale, and porter disgusted me by their bitterness. Porter was peculiarly nauseous to me. I early saw the ill-effects of wine on youths, and was frightened by accounts of college drunkenness. For this reason, as well as from economy, I never became a wine-drinker, further than to drink healths by just colouring water in a glass. I have never dreamed of needing wine, though often in old time ordered by physicians to drink it. Not having then the same power to look over their heads—which experience of their changes and their follies has brought to me—I used to obey a little while, but quickly reverted to my glass of water, and never had reason to believe, from my own case, that there was any advantage from the wine. In 1860-1, the Parisian experiments proved that all alcohol arrests digestion. Since then I have called myself a teetotaler. To me it seems clear that love of the drink, or fear of losing patients by forbidding it, are the true cause of the fuss made in its favour. I grieve that so noble a fruit as grapes should be wasted on

wine. The same remark will hold of barley, of honey, of raisins, of dates: from which men make intoxicating drinks. As to tobacco—while I was in Turkey more than fifty years ago, I learned to smoke Turkish tobacco in a long Turkish pipe, partly to relieve evil smells, partly because it is uncivil there to refuse the proffered pipe. I never was aware of good or evil from it, and with perfect ease laid it aside when I quitted the soil of Asia. After this, a cigar was recommended to me in England, as a remedy for loss of sleep, but the essential oil of tobacco so near to my nose disgusted me, and the heat or smoke distressed my eyes. I have never felt any pleasure, rather annoyance, from English smoking; and since the late Sir Benjamin Brodie published his pamphlet against it (perhaps in 1855), I have learned that the practice is simply baneful. They say "it soothes"—which I interpret to mean—"it makes me inattentive and dreamy."

FRANCIS W. NEWMAN.

March 2, 1882.

The Rev. MARK PATTISON, B.D.

The story of my personal experiences of alcohol is one which would require more time than I can now command to write properly. I can now only say that I did not begin wine, as a habit, till I was thirty-seven; that, at first, an occasional effect was favourable to the brain power, but always followed by corresponding reaction towards feebleness. About fifty-seven, I was obliged to give up wine altogether; I found great general advantage from doing so, and no disadvantage whatever as regards mental activity. I am now sixty-eight, and take a glass of claret every third day, or oftener. This medicine does not produce any perceptible effect on the brain directly, but I have a fancy that I sleep better after wine; and sleep I have always looked to as the best brain restorative.* Spirits I have never

*Sleep is the Best Stimulant.—The best possible thing for a man to do when he feels too weak to carry anything through is to go to bed and sleep for a week, if he can. This is the only recuperation of brain-power, the only recuperation of brain-force; because during sleep the brain is in a state of rest, in a condition to receive and appropriate particles of nutriment from the blood, which take the place of those that have been consumed in previous labour, since the very act of thinking consumes or burns up solid particles, as every turn of the wheel or screw of the steamer is the result of the consumption by fire of the fuel in the furnace. The supply of consumed brain-substance can only be had from the nutritive particles in the blood, which were obtained from the food eaten previously; and the brain is so constituted

drunk. Though I have been a smoker for many years, I cannot say anything as to its effects.

MARK PATTISON.

March 16, 1882.

that it can best receive and appropriate to itself those nutritive particles during a state of rest, of quiet, and stillness of sleep. Mere stimulants supply nothing in themselves; they goad the brain, and force it to a greater consumption of its substance, until the substance has been so exhausted that there is not power enough left to receive a supply, just as men are so near death by thirst and starvation that there is not power enough left to swallow anything, and all is over.—*Scientific American.*

MR. JAMES PAYN.

In common with nine-tenths of my literary brethren, I am a constant smoker. I smoke the whole time I am engaged in composition (three hours *per diem*), and after meals; but very light tobacco—*latakia**. That it stimulates the imagination, I have little doubt; and as I have worked longer and more continuously for thirty years than any other author (save one); I cannot believe that

*Latakia, or Turkish, are called mild tobaccos, and although they produce dryness of the tongue, from the ammonia evolved in their smoke, they do not upset the digestion so materially, nor nauseate so much as the stronger tobaccos, unless they are indiscriminately used.—DR. B. W. RICHARDSON. ("*Diseases of Modern Life.*")

tobacco has done me any harm. Those who object to it have never tried it, or find it disagrees with them. How can they, therefore, be in a position to judge? I find cigars disagree with *me*, but I do not on that account pronounce them unwholesome for everybody. I drink very little alcohol—only light claret, and occasionally dry champagne—but I do not know what effect drinking alcohol has upon composition.

JAMES PAYN.

MR. EIZAK PITMAN,

AUTHOR OV "FONOGRAFI OR FONETIK SHORTHAND," AND ORIJINATER OV THE SPELING REFORM.

If a breef skech ov mei leif, and the deietetik maner ov it, wil be ov servis tu you, ei gladly giv it. Your rekwest abzolvz me from the impiutashon ov boasting. If you make it publik, pray let it be printed in the parshiali reformd speling in hwich it iz riten.

Ei hav been an abstainer from the stimiulant alkohol nearli all mei leif, and ei hav alwayz refraind from the

seduktiv influens ov the sedativ tobáko. Ei hav therefor no eksperiens tu ofer ov their use, eksept that about 1838 ei woz rekomended tu take a glas ov wein per day az a tonik, and az a remedi for dispepsia, hwich then began tu trubel me. After obeying this medikal preskripshon for a year or two, and feinding no releef from it, ei gave up both the wein and the use ov flesh, "the brandi ov deiet;" the dispepsia disapeard, and haz never vizited me sins.

Ei am nou verjing on seventi. Ei intensli enjoi leif and labor, and rekweir nuthing beyond the laborz ov the day, and the walk tu and from mei ofis, hwich iz a meil, tu indiús refreshing sleep. Ei keep up mei leif-long praktis ov reteiring at ten o'klok, and beïng at mei desk at siks. About three yearz ago ei adopted the kustom ov taking a siesta for half an oúr after diner. It iz wel, az Milton obzervz, tu giv the bodi rest diuring the ferst konkokshon ov the prinsipal meal.

The uzhual sumer vizit tu the sea-seid woz unnon tu me til ei woz fifti yearz ov aje. From 1837 (the date ov the publikashon ov "Fonografi") tu 1861 (the date ov mei sekond maraje), nearli a kworter ov a sentiuri, ei wurkt on from siks in the morning til bed-teim, ten o·klok, without an intervening thought ov a holiday. Ei felt no wont ov a temporeri respit from labor bekauz ei

tuk no ekseiting food or drink ; and ei shud az soon hav meditated a breach in the Dekalog az a breach in mei daili round ov diutiz bei eidling at the sea-seid. In 1861 ei relákst, and komenst the praktis ov leaving mei ofis at siks in the evening. At the same teim ei komenst viziting the variüs watering plasez, or goïng tu the Kontinent in the sumer for four or feiv weeks. This rekriashon ei have taken more for the sake ov mei weif and two sunz than from eni feeling ov nesesiti for it on mei own part.

From mei own eksperiens ov the benefits ov abstinens from the sedativ alkohol, and the stimulants tobáko and snuf ; and mei obzervashon ov the efekts ov theze thingz on personz who indulj in them, ei hav a ferm konvikshon that they ekserseiz a dedli influens on the hiuman rase.

Eizak Pitman.

March 25, 1882.

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M. GASTON PLANTÈ.

I am much flattered by the interest that you attach to my opinion on the subject of the influence that

certain substances can have upon thought and upon intellectual work. I must tell you frankly that I have not found that tobacco or alcohol have an advantageous influence. It is true that I have not made much use of them—I have never taken pure spirits, such as brandy, but only of wine containing a little. I have been obliged sometimes, in trying to fortify my health, to take some Bordeaux wine, and I have not observed that any appreciable effect resulted from it upon the facility of intellectual work. From the point of view of health, I counted particularly upon the iron contained in good Bordeaux wine, but I have found that the alcohol in the wine over-excited the nervous system, provoked sleeplessness and cramps; and I have finally adopted as a drink wine mixed with water, and even this in very small quantities. As to tobacco, I have also tried it; and far from thinking that it favours intellectual work, I believe, with one of our learned writers (the Abbé Moigno, Editor of the "*Journal du Mondes*"), that its use tends to weaken the memory. Neither do I make use of coffee, which equally excites the nervous system, although, like all the world, I have observed that this substance gives a certain intellectual activity. What I have found out most clearly is what everyone has observed from time immemorial—that the clearest ideas,

the happiest and most fruitful expressions, come in the morning, after the repose of the night, and after sleep—when one has it, but of which I have not a very large share. I attach so much importance to the ideas which come during the night or in the morning, that I have always at the head of my bed paper and pencil suspended by string, by the help of which I write every morning the ideas I have been able to conceive, particularly upon subjects of scientific research.* I write these notes in obscurity, and decipher and develop them in the morning, pen in hand. This is the reply I can make to your interesting enquiry. I shall be happy to know the conclusion to which you will be conducted by the information which you will have been able to collect.

GASTON PLANTÉ.

* Curtis, I think, says that whenever Emerson has a "happy thought," he writes it down, be it dawn or midnight, and when Mrs. Emerson, startled in the night by some unusual sound, cries, "What is the matter? Are you ill?" the philosopher's soft voice answers, "No, my dear, only an idea."—*Appleton's New York Journal*, Nov., 1873.

The Rev. A. PLUMMER,

Head Master of the Durham College.

University Tutor and Lecturer, and University Proctor.

I am a firm believer in the value of a moderate use of tobacco and alcohol for the brain worker. I generally smoke one pipe in the morning, *before* work, and one at night, *after* work (or the equivalents of a pipe). I seldom smoke *while* I work, and do not find it helpful. I drink two glasses of sherry (or their equivalents), as a rule daily, and take them at late dinner—not at lunch. If troubled with sleeplessness, I find a glass of sherry, and a few biscuits, followed by smoking, a tolerably safe cure, but not *always* to be relied upon. I should be very sorry to attempt to do without these two helps. Of the two I believe the smoking to be the more valuable, especially when (what is far worse than heavy work) *worry* is pressing upon one. I am wholly sceptical as to the value of work before breakfast. Let a man get up as early as he likes: but don't let him try to work on an empty stomach. The Irishman was wise who said that when he worked before breakfast, he always had something to eat first.

A. Plummer.

April 6, 1882.

Mr. EDWARD POCKNELL,

(Pocknell's Press Agency and London Associated Reporters.)

In reply to your letter, I should say that tobacco has some action on the brain; but I think its action different in different people, and at different times in the same person. I think the action soothing after food, but exciting on an empty stomach. In the former case I think it promotes thinking in this way:—that the mind concentrates its attention better during the mechanical operation of "puffing," than when it is liable to be disturbed when not so occupied. For this reason I should say that smoking does help to get through work late at night. I find frequently that having commenced to write with a fresh pipe in my mouth, I go on a long time after it goes out; but as it remains in my mouth, it seems to have almost the same effect till the discovery, at some pause, that my pipe is out; and then it is a relaxation to spare a moment to refill it. I do not look upon smoking as a necessity to mental labour; but it seems to me, as a smoker, an agreeable and useful method for concentrating thought upon any subject.

But I think it would be difficult to lay down any general rule for persons of different constitutions.

E. Pocknell.

March 10, 1882.

Professor GEORGE RAWLINSON.

Although it does not appear to me that the method of your enquiry can lead to any important results, you are quite welcome to any information that I can give you on the subject. I was brought up to take daily a moderate amount of beer or wine, and have continued to do so all my lifetime, with the exception that my beer has been cut off, and I have been recommended to take a little brandy and soda-water, or whiskey and soda-water instead. I smoked an occasional cigar when I was young, but never much liked tobacco, and gave up the practice entirely when I was about five and twenty. I have never tried leaving off alcoholic liquors, being advised medically that it would probably be injurious to me to do so. I am, therefore, quite unable to say what effect my doing so would have on my powers of thought and work.

George Rawlinson.

March 28, 1882.

Mr. CHARLES READE.

Your subject is important, and your method of enquiry sound. I wish I could throw any light, but I cannot more than this. I tried to smoke five or six times, but it always made me heavy and rather sick; therefore, as it is not a necessary of life, and costs money, and makes me sick, I spurned it from me. I have never felt the want of it. I have seen many people the worse for it. I have seen many people apparently none the worse for it. I never saw anybody perceptibly the better for it.

C. Reade.

Feb. 2, 1882.

Mr. THOMAS ALLEN REED.

You ask me whether I have found tobacco or wine a help to me in my work. No! As to the first, for the sufficient reason that I have never tried it. I never smoked a pipe or a cigar in my life, and have no intention of commencing the practice. When, more than thirty years ago, I entered upon my profession, I was

told by my *confrères* that I should soon follow their example, and they smiled at my innocence when I declared that I thought they were mistaken. As to alcohol, I am not a teetotaler, but I think I can truly say that I never found the least benefit from wine or beer in my daily or nightly work. Indeed, I consider them rather a hindrance, having a tendency to make one heavy and sleepy. I have been, and am still, a tolerably hard worker, without the use of artificial stimulants, and judging from my own experience, and that of many others with whom I have been connected in my professional labours, I don't believe in their efficacy. If I take a glass of wine occasionally (not a frequent indulgence with me) it is because I like it, not because I think it helps me in my work.

T. A. Reed.

Feb. 18, 1882.

Dr. JULIUS RODENBERG.

I have smoked from my seventeenth year, and could not do without it now. On the whole, I am but a moderate smoker, and seldom smoke whilst walking, but

at work I must have my cigar, and find it agrees very well with my health. Most of my learned and literary friends smoke ; but two or three of them have given it up in their later years without visible effect upon their health or mental strength. As to alcohol, I could not stand to drink brandy. Sometimes I drink a glass, but only as an exception. I find it much more convenient for me, and a good help to work, to take now and then a bottle of hock or champagne ; but, as a rule, I drink half a bottle of claret at dinner, and a pint of beer at supper. I generally write in the morning from nine to half-past one, when I dine ; and from five o'clock in the afternoon to nine, when I take supper, but I could not bear to drink either wine or beer while at work.

JULIUS RODENBERG.

March 12, 1882.

DR. W. H. RUSSELL.

I am not able to give you any very positive expression of opinion on the matter respecting which you

write, but I can say that I have smoked tobacco and taken wine for years, and though I cannot aver that I should not have done as well without them, I have felt comforted and sustained in my work by both at times, especially by the weed. However, I was very well in the last campaign in South Africa, where for some time we had neither wine nor spirits. Climate has a good deal to say to the craving for a stimulant, and men in India, who never drink in England, there consume "pegs" and cheroots enormously. Of course, tobacco is to be put out of account in relation to great workers and thinkers up to the close of the middle ages, but the experience of antiquity would lead one to infer that the moderate use of wine, at all events, was not unfavourable to the highest brain development and physical force. Bismarck and Moltke are very great smokers; neither is a temperance man. In effect, I am inclined to think that tobacco and stimulants are hurtful mostly in the case of inferior organizations of brain physique, where their use is only a concomitant of baser indulgences, and uncontrolled by intelligence and will. I am quite in favour, therefore, of legislative interference, and almost inclined to supporting the Permissive Bill.

W. H. Russell.

Feb. 23, 1882.

(For) Mr. JOHN RUSKIN.

You are evidently unaware that Mr. Ruskin entirely abhors the practice of smoking, in which he has never indulged. His dislike of it is mainly based upon his belief (no doubt a true one) that a cigar or pipe will very often make a man content to be idle for any length of time, who would not otherwise be so. The excessive use of tobacco amongst all classes abroad, both in France and Italy, and the consequent spitting everywhere and upon everything, has not tended to lessen his antipathy. I have heard him allow, however, that there is reason in the soldiers and the sailors' pipe, as being some protection against the ill effects of exposure, etc. As to the effect of tobacco on the brain, I know that he considers it anything but beneficial.

Feb. 12, 1882.

KESHUB CHUNDER SEN.

The problem you have undertaken to solve is, indeed, one of intense importance and interest, and all who can ought to help its solution in the interests both of science and morality. I feel thankful for the honour you have done me in inviting my opinion on the subject. As a teetotaler I abstain wholly from intoxicating drinks and stimulants, and discourage the use of the same in others. From boyhood up to the present time —I am now 44—I have never been in the habit of drinking or of smoking, nor did it ever occur to me that such habits were essential to health or helpful to brain work. It is my firm conviction that neither the head nor the hand derives any fresh power from the use of stimulants. It is only habits already contracted which give to alcohol and tobacco their so-called stimulating properties, and engender a strong craving for them, which those who are not enslaved by such habits never experience. I must not, however, place alcohol and tobacco on the same level. The latter is comparatively harmless ; the former is a prolific source of evil in society, and often acts like deadly poison.

KESHUB CHUNDER SEN.

July 29, 1882.

M. JULES SIMON.

Some twenty years ago I had occasion to study the condition of the working classes, when I did not fail to observe the pernicious effects produced upon their health and morals by the use of strong liquors. I remember that one of the most painful results of my inquiry was that whilst some look for pleasure in the abuse of intoxicating liquor, others, unable to procure sufficient food, seek to blunt the edge of their appetite by drinking a little brandy. As my researches were made so long ago, my testimony will now be of little value. Everything changes in twenty years, and I would fain hope that during this period a change for the better has taken place in the habits of the people. I have not much to say on the use of tobacco. I believe that when taken in excess, it has a stupefying effect. I know that it may act as a poison, for a friend of mine, a member of the Senate, who has just died, assured me repeatedly that he was dying from the effects of constant smoking.

I look upon the use of tobacco as a practice much to be deprecated, as its tendency is to separate men from the society of women.

JULES SIMON.

March 8, 1882.

Professor SKEAT.

As to the benefit of alcohol and tobacco, my opinion is that there is no *general* rule. As for myself, my experience is, that the less stimulant I take, the better. I have given up beer with benefit to myself, and I have almost given up wine. I take, on an average, about five glasses of claret per week, more by way of luxury than of use. Tobacco I never use, as smoking seems to me to be rather a waste of time.

Walter W. Skeat.

March 16, 1882.

M. BARTHÈLEMY ST. HILAIRE.

I have no difficulty in making known to you my views on the effects of tobacco and alcohol. I believe both to be extremely injurious, as they are the cause of many diseases, even when taken in small quantities, and much more so when indulged in to excess. I have never used them personally, but I have only too often observed their baneful influence on individuals of my

acquaintance. I do not even consider wine to be harmless, especially as it is most usually adulterated. I have abstained from it for many years, indeed for nearly a lifetime, with great advantage. In our climate none of these stimulants are needed, and I very much question whether they are more necessary elsewhere.

Accept my thanks for the questions you have addressed to me.

B. St. Hilaire.

Feb. 24, 1882.

Mr. W. SPOTTISWOODE, D.C.L., LL.D.,

President of the Royal Society.

In reply to your enquiry, I beg to say that I have never smoked, and that I take wine only at meals, and in moderation. I have never observed any noticeable effect from wine so taken on mental work, but should think it quite insignificant.

W. Spottiswoode.

Dr. C. W. SIEMENS, D.C.L., F.R.S.

My experience has only extended to a very moderate use of alcohol and tobacco. I find that even the most moderate use of tobacco is decidedly hurtful to energetic mental effort. With regard to alcohol, a very moderate amount does not appear to depress the mental condition, under ordinary circumstances, but I find that although I never indulged in its use I can do very well without it, and I am doing with less and less. Under certain conditions, however, I find that alcohol has a beneficial effect in restoring both mind and body to a state of power and activity.

C. W. Siemens.

Dec. 4th, 1882.

Mr. G. BARNETT SMITH.

I should probably not be accepted as an authority upon the tobacco question, as I have never smoked a pipe or cigar in my life. As to the use of alcohol, the moderate quantity I have taken has not been detrimental to me, and, in consequence of the state of my

health, it has sometimes been necessary. No doubt a larger quantity of stimulant than is essential is taken by many literary men, and by other classes of the community; but a moderate quantity would, I believe, be found beneficial by most writers. Of course, if a man finds that he can do quite as well without alcohol, he is undoubtedly wise in discarding it.

G. Barnett Smith.

March 28, 1882.

M. TAINE.

I regret that it is not in my power to give you the information you ask. I have not made the question a study, and have no fixed opinion about it. All that I can say is that I have never made use of alcohol in any form as an essential stimulant. Coffee suits me much better. Alcohol, so far as I can judge, is good only as a physical stimulant after great physical fatigue, and even then it should be taken in very small quantities. As for tobacco, I have the bad habit of smoking cigarettes, and find them useful between two ideas,—when I have the first but have not arrived at the

second; but I do not regard them as a necessity. It is probable that there is a little diversion produced at the same time, a little excitement and exhilaration. But every custom of this kind becomes tyrannical, and the observations which accompany your letter are very judicious. Among the men of letters and men of science around me there is not one to my knowledge who in order to think and to write has recourse to spirituous liquors; but three-fourths of them smoke, and almost all take before their work a cup of coffee. I have seen English journalists writing their articles by night with the aid of a bottle of champagne. With us, the articles are written in the day time, and our journalists have, therefore, no necessity to resort to this stimulant.

H. TAINE.

March 28, 1882.

MR. ANTHONY TROLLOPE.

I have been a smoker nearly all my life. Five years ago I found it certainly was hurting me, causing my hand to shake and producing somnolence. I gave it

up for two years. A doctor told me I had smoked too much (three large cigars daily). Two years since I took to it again, and now smoke three small cigars (very small), and, so far as I can tell, without any effect.

ANTHONY TROLLOPE.

Feb. 11, 1882.

SIR WILLIAM THOMSON, M.A., LL.D., D.C.L., F.R.S.

The question of usefulness or the reverse of tobacco or alcohol is one of health, and to be answered by medical men, if they can. It seems to me that neither is of the slightest consequence as a stimulus or help to intellectual efforts, but that either may be used without harm or the reverse if in small enough quantities, so as not to hurt the digestion.

WILLIAM THOMSON.

Feb. 13, 1882.

PROFESSOR TRANTMANN, Bonn University.

I am not a smoker, so that I am unable to make any statement regarding the effect of tobacco. As to alcohol, I never make use of spirits in order to stimulate my brain, but often, after working hard, I drink a glass of beer or wine, and immediately feel relieved.

M. Trantmann.

March 14, 1882.

PROFESSOR TYNDALL, LL.D., F.R.S.

With regard to the use of alcohol and tobacco, I do not think any general rule can be laid down. Some powerful thinkers are very considerable smokers, while other powerful thinkers would have been damaged, if not ruined, by the practice. A similar remark applies in the case of alcohol. In my opinion, the man is happiest who is so organised as to be able to dispense with the use of both.

John Tyndall.

Feb. 14, 1882.

Mr. IVAN TOURGUÉNEFF.

In answer to your enquiry I have to state that I have no personal experience of the influence of tobacco and alcohol on the mind, as I do not smoke or use alcoholic drinks. My observations on other people lead me to the conclusion that tobacco is generally a bad thing, and that alcohol taken in very small quantities can produce a good effect in some cases of constitutional debility.

Iv. Tourguéneff.

March 14, 1882.

MARK TWAIN.

I have not had a large experience in the matter of alcoholic drinks. I find that about two glasses of champagne are an admirable stimulant to the tongue, and is, perhaps, the happiest inspiration for an after dinner speech which can be found; but, as far as my experience goes, wine is a clog to the pen, not an inspiration. I have never seen the time when I could write to my satisfaction after drinking even one glass of wine.

As regards smoking, my testimony is of the opposite character. I am forty-six years old, and I have smoked

immoderately during thirty-eight years, with the exception of a few intervals, which I will speak of presently. During the first seven years of my life I had no health—I may almost say that I lived on allopathic medicine, but since that period I have hardly known what sickness is. My health has been excellent, and remains so. As I have already said, I began to smoke immoderately when I was eight years old ; that is, I began with one hundred cigars a month, and by the time I was twenty I had increased my allowance to two hundred a month. Before I was thirty, I had increased it to three hundred a month. I think I do not smoke more than that now ; I am quite sure I never smoke less. Once, when I was fifteen, I ceased from smoking for three months, but I do not remember whether the effect resulting was good or evil. I repeated this experiment when I was twenty-two ; again I do not remember what the result was. I repeated the experiment once more, when I was thirty-four, and ceased from smoking during a year and a half. My health did not improve, because it was not possible to improve health which was already perfect. As I never permitted myself to regret this abstinence, I experienced no sort of inconvenience from it. I wrote nothing but occasional magazine articles during pastime, and as I never wrote one except under strong

impulse, I observed no lapse of facility. But by and by I sat down with a contract behind me to write a book of five or six hundred pages—the book called "Roughing it"—and then I found myself most seriously obstructed. I was three weeks writing six chapters. Then I gave up the fight, resumed my three hundred cigars, burned the six chapters, and wrote the book in three months, without any bother or difficulty. I find cigar smoking to be the best of all inspirations for the pen, and, in my particular case, no sort of detriment to the health. During eight months of the year I am at home, and that period is my holiday. In it I do nothing but very occasional miscellaneous work; therefore, three hundred cigars a month is a sufficient amount to keep my constitution on a firm basis. During the family's summer vacation, which we spend elsewhere, I work five hours every day, and five days in every week, and allow no interruption under any pretext. I allow myself the fullest possible marvel of inspiration; consequently, I ordinarily smoke fifteen cigars during my five hours' labours, and if my interest reaches the enthusiastic point, I smoke more. I smoke with all my might, and allow no intervals.

MARK TWAIN.

March 14, 1882.

Mr. CORNELIUS WALFORD, F.S.S., F.I.A.

The subject you enquire about is one of vital consequence to brain-workers. I am distinctly of opinion that all stimulants are decidedly injurious to the physical system, and that as a consequence they tend to weaken and destroy the mental powers. I believe tobacco to be a more insidious stimulant than alcoholic beverages. It can be indulged in more constantly without visible degradation; but surely it saps the powers of the mind. In this view I gave it up some years ago. Many men say they smoke to make them think. I notice that a number of them seem to think to very small purpose, either for themselves or mankind generally. I am not a total abstainer, and theoretically have had a belief that pure wine ought to be beneficial to the human system. In practice I have not found it so, though I have always been a very moderate drinker. I certainly never drank a glass of wine or any other liquor in view of mental stimulus, and did not know it was ever seriously regarded as having any such effect, except in so far as it might invigorate the body, which I now find it does not do; but in case of sedentary occupations is positively injurious in its effects. Until mankind can rise

above beer and tobacco, the race will remain degraded, as it now is, mentally, socially and physically.

P.S.—I have never had so large an amount of mental labour on hand as now—three works in the press (including an encyclopedia, whereof all the articles are written by myself), all requiring much thought and research. I am taking no stimulants whatever.

CORNELIUS WALFORD.

March 9, 1882.

MR. G. F. WATTS, R.A.

In answer to your letter asking for my experience and opinion as a worker, on the subject of tobacco and alcoholic stimulants, I must begin by saying that reflection and experience should teach us the truth of the adage that "What is one man's meat is another man's poison," and that what may be wisely recommended in some cases is by no means desirable in all; in fact, that it is equally unwise and illiberal to dogmatise upon any subject that is not capable of scientific proof. Being myself a total abstainer from tobacco, and equally so,

when not recommended by my doctor, from wine and all stimulants, I confess to having a strong prejudice against them. The use of wine seems to be natural to man, and it is possible he would be the better for it if it could be restrained within very moderate limits; but I have good reason for concluding that the more active stimulants are altogether harmful. It is natural as time goes on that new wants should be acquired, and new luxuries discovered, and doubtless it is in the abuse, and not in the use, of such things that the danger lies; but we all know how prone humanity is to abuse in its indulgences. It is, I believe, an admitted fact that even people who are considered to be strictly temperate as a rule, habitually take more wine than is good for them. With regard to tobacco, I cannot help thinking that its introduction by civilised races has been an unmixed evil. History shows us that before it was known the most splendid mental achievements were carried out, and the most heroic endurance exhibited, things done which if it be possible to rival, it is quite impossible to excel. The soldier, and sailor, the night-watchman especially in malarious districts may derive comfort and benefit from its use, and there I think it should be left; for my observation has induced me to think that nothing but evil results from its use as a

luxurious habit. The subject is doubtless one of vital interest and importance; but I must end as I began by disclaiming a right to dogmatise.

G. F. Watts.

Feb. 19, 1882.

Professor ANDREW WILSON, Ph.D., F.R.S.E.

The question you ask concerning the effects of alcohol and tobacco upon the health of brain-workers, relatively (I presume) to myself, is a complex one. Personally, I find with often excessive work in the way of lecturing, long railway journeys, and late hours, writing at other times, that I digest my food with greater ease when I take a little claret or beer with meals. Experiment has convinced me that the slight amount of alcohol I imbibe in my claret is a grateful stimulus to digestion. As to smoking, I take an occasional cigar, but only after dinner, and never during the day. As to health, I never suffer even from a headache. I usually deliver 18 lectures a week, often more; and I have often to make journeys of over 50 miles after a hard day's work here, to lecture in the country. My writing is done at night chiefly,

but as a rule, I don't sit after 12-30. My work is exceptionally constant, yet I seem to be exceptionally healthy. I regard my claret or wine to meals in the same light in which others regard their tea, as a pleasant stimulus, followed in my case by good effect. At the same time, there may be others who may do the same amount of work as abstainers. My position in this matter has always been that of recognising the individual phases of the matter as the true basis of its settlement. What I can urge is, that I am an exceptionally healthy man, doing what I may fairly claim to be exceptionally hard work, and careful in every respect of health, finding that a moderate quantity of alcohol, with food, is for me better than total abstinence. Whiskey, or alcohol, in its strong forms I never taste.

ANDREW WILSON.

Feb. 14, 1882.

MR. JUSTIN WINSER.

Referring to your note, I may say that I have never used stimulants to incite intellectual work, but have found occasionally in social gatherings a certain

intellectual exhilaration arising from its use, which conduces to quickness of wit, etc., but perhaps not so much from alcoholic liquors as from coffee, a cup of coffee being with me a good preparation for an after-dinner speech. My moderate use of a stimulant has not disclosed to me beneficial or hurtful effects. I often go long intervals without it; and have never indulged in it, to great extent, so that my testimony is of a narrow experience. My use of tobacco is so inconsiderable as to show nothing.

JUSTIN WINSER.

March 9, 1882.

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M. WURTZ,

PARIS.

In reply to your letter of the 7th February, I have the honour to recall you the opinion which is current to-day among doctors of the highest authority, namely, that the abuse of alcohol and tobacco offers the greatest inconvenience from the point of view of health. Alcoholism produces a state of disorder of the organism to which a great number of maladies attach themselves.

It is not a question of the moderate use of excitants, but the limit between use and abuse is difficult to trace, because it varies according to the country, the climate, and the habits of the individual constitution.

A. WURTZ.

March 14, 1882.

APPENDIX.

APPENDIX.

Dr. RISDON BENNETT.

"There are few people, I believe, who are aided in the actual performance of brain-work by alcohol; not that many, nay, most persons, are not rendered more ready and brilliant in conversation, or have their imagination quickened for a time. But the steady, continued exercise of the mental powers demanded of professional men is more often impeded than aided at the time by alcohol."

Contemporary Review, vol. 34, p. 343.

The Rev. STOPFORD A. BROOKE, M.A.

"It has been said that moderate doses of alcohol stimulate work into greater activity, and make life happier and brighter. My experience, since I became a total abstainer, has been the opposite. I have found myself able to work better. I have a greater command

over any powers I possess. I can make use of them when I please. When I call upon them, they answer; and I need not wait for them to be in the humour. It is all the difference between a machine well oiled and one which has something among the wheels which catches and retards the movement at unexpected times. As to the pleasure of life, it has been also increased. I enjoy Nature, books, and men more than I did—and my previous enjoyment of them was not small. Those attacks of depression which come to every man at times who lives too sedentary a life rarely visit me now, and when depression does come from any trouble, I can overcome it far more quickly than before. The fact is, alcohol, even in the small quantities I took it, while it did not seem to injure health, injures the fineness of that physical balance which means a state of health in which all the world is pleasant. That is my experience after four months of water-drinking, and it is all the more striking to me, because for the last four or five years I have been a very moderate drinker. However, the experience of one man is not that of another, and mine only goes for what it is worth to those to whom as much alcohol as is contained in one glass of sherry, or port, alters away from the standard of health. I have discovered, since

abstinence, that that is true of me. And I am sure, from inquiries I have made, that it is true for a great many other people who do not at all suspect it. Therefore, I appeal to the young and the old, to try abstinence for the very reasons they now use alcohol—in order to increase their power of work and their enjoyment of life. Let the young make the experiment of working on water only. Alcohol slowly corrupts and certainly retards the activity of the brain of the greater number of men. They will be able to do all they have to do more swiftly. And this swiftness will leave them leisure—the blessing we want most in this over-worked world. And the leisure, not being led away by alcohol into idleness, into depression which craves unnatural excitement, into noisy or slothful company, will be more nobly used and with greater joy in the usage. And the older men, who find it so difficult to find leisure, and who when they find it cannot enjoy it because they have a number of slight ailments which do not allow them perfect health, or which keep them in over-excitement or over-depression, let them try—though it will need a struggle—whether the total abandonment of alcohol will not lessen all their ailments, and by restoring a better temper to the body—for the body with alcohol in it is like a house

with an irritable man in it—enable them not only to work better, but to enjoy their leisure. It is not too much to say that the work of the world would be one-third better done, and more swiftly done, and the enjoyment of life increased by one-half, if no one took a drop of alcohol."

Speech at Bedford Chapel, July 20th, 1882.

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WILLIAM C. BRYANT.

(BORN 1794; DIED 1878.)

I promised to give you some account of my habits of life, so far, at least, as regards diet, exercise, and occupation. I have reached a pretty advanced period of life, without the usual infirmities of old age, and with my strength, activity, and bodily faculties generally in pretty good preservation. How far this may be the effect of my way of life, adopted long ago, and steadily adhered to, is perhaps uncertain.

I rise early, at this time of the year about $5\frac{1}{2}$; in summer, half an hour, or even an hour, earlier. Immediately, with very little incumbrance of clothing,

I begin a series of exercises, for the most part designed to expand the chest, and at the same time call into action all the muscles and articulations of the body. These are performed with dumb-bells, the very lightest, covered with flannel; with a pole, a horizontal bar, and a light chair swung around my head. After a full hour, and sometimes more, passed in this manner, I bathe from head to foot. When at my place in the country, I sometimes shorten my exercises in the chamber, and, going out, occupy myself for half an hour or more in some work which requires brisk exercise. After my bath, if breakfast be not ready, I sit down to my studies until I am called.

My breakfast is a simple one—hominy and milk, or in place of hominy, brown bread, or oat-meal, or wheaten grits, and, in the season, baked sweet apples. Buckwheat cakes I do not decline, nor any other article of vegetable food, but animal food I never take at breakfast. Tea and coffee I never touch at any time. Sometimes I take a cup of chocolate, which has no narcotic effect, and agrees with me very well. At breakfast I often take fruit, either in its natural state or freshly stewed.

After breakfast I occupy myself for awhile with my studies, and then, when in town, I walk down to the

office of *The Evening Post*, nearly three miles distant, and after about three hours, return, always walking, whatever be the weather or the state of the streets. In the country I am engaged in my literary tasks till a feeling of weariness drives me out into the open air, and I go upon my farm or into the garden and prune the trees, or perform some other work about them which they need, and then go back to my books. I do not often drive out, preferring to walk.

In the country I dine early, and it is only at that meal that I take either meat or fish, and of these but a moderate quantity, making my dinner mostly of vegetables. At the meal which is called "tea," I take only a little bread and butter, with fruit, if it be on the table. In town, where I dine later, I make but two meals a day. Fruit makes a considerable part of my diet, and I eat it at almost any part of the day without inconvenience. My drink is water, yet I sometimes, though rarely, take a glass of wine. I am a natural temperance man, finding myself rather confused than exhilarated by wine. I never meddle with tobacco, except to quarrel with its use.

That I may rise early, I, of course, go to bed early: in town, as early as 10; in the country, somewhat earlier. For many years I have avoided in the evening

every kind of literary occupation which tasks the faculties, such as composition, even to the writing of letters, for the reason that it excites the nervous system and prevents sound sleep.

My brother told me, not long since, that he had seen in a Chicago newspaper, and several other Western journals, a paragraph in which it is said that I am in the habit of taking quinine as a stimulant; that I have depended upon the excitement it produces in writing my verses, and that, in consequence of using it in that way, I had become as deaf as a post. As to my deafness, you know that to be false, and the rest of the story is equally so. I abominate all drugs and narcotics, and have always carefully avoided every thing which spurs nature to exertions which it would not otherwise make. Even with my food I do not take the usual condiments, such as pepper, and the like.

March 30, 1871.

Hygiene of the Brain, New York, 1878.

Dr. KING CHAMBERS,

Honorary Physician to H.R.H. the Prince of Wales.

"The physiology of the action of alcohol has a very practical bearing on the physical regimen of the mental functions. Alcohol has the power of curbing, arresting, and suspending all the phenomena connected with the nervous system. We feel its influence on our thoughts as soon as on any other part of the man. Sometimes it brings them more completely under our command, controls and steadies them; sometimes it confuses or disconnects them; then breaks off our power and the action of the senses altogether. The first effect is desirable, the others to be avoided. When a man has tired himself with intellectual exertion a moderate quantity of alcohol taken with food acts as an anæsthetic, stays the wear of the system which is going on, and allows the nervous force to be diverted to the due digestion of the meal. But it must be followed by rest from mental labour, and is, in fact, a part of the same regimen which enforces rest—it is an artificial rest. To continue to labour and at the same

time to take the anæsthetic is an inconsistency. It merely blunts the painful feeling of weariness, and prevents it from acting as a warning. I very much doubt the quickening or brightening of the wits which bacchanalian poets have conventionally attributed to alcohol. An abstainer in a party of even moderate topers finds their jokes dull and their anecdotes pointless, and his principal amusement consists in his observation of their curious bluntness to the groundlessness of their merriment. There is no more fatal habit to a literary man than that of using alcohol as a stimulant between meals. The vital powers go on getting worn out more and more without their cry for help being perceived, and in the end break down suddenly, and often irrevocably. The temptation is greater perhaps to a literary man than to any other in the same social position, especially if he has been induced by avarice, or ambition, to work wastefully against them ; and if he cannot resist it, he had better abjure the use of alcohol altogether. . . . . Mental activity certainly renders the brain less capable of bearing an amount of alcohol, which in seasons of rest and relaxation does not injuriously affect it. When any extraordinary toil is temporarily imposed, extreme temperance, or even total abstinence, should be the rule.

Much to the point is the experience of Byron's Sardanapalus :—

> " The *goblet* I reserve for hours of ease,
> I war on *water*."

It is true that Byron assumes in his poetry the character of a *débauché*, and says he wrote Don Juan under the influence of gin and water. But much of that sort of talk is merely for stage effect, and we see how industrious he was, and read of his training vigorously to reduce corpulence, and of his being such an exceptionally experienced swimmer as to rival Leander in crossing the Hellespont. . . . . The machinery of sensitive souls is as delicate as it is valuable, and cannot bear the rough usage which coarse customs inflict upon it. It is broken to pieces by blows which common natures laugh at. The literary man, with his highly-cultivated, tightly-strung sensations, is often more than others susceptible of the noxious, and less susceptible of the beneficial results of alcohol. His mind is easier to cloud, and there is a deeper responsibility in clouding it. . . . . Equally when we descend into the lower regions of Parnassus, the abodes of talent and cleverness, and the supply of periodical literary requirements, we find the due care of the body absolutely essential to the continued

usefulness of the intellect. The first thing to which one entering the profession of literature must make up his mind is to be healthy, and he can only be so by temperance. . . . . Tobacco should not be indulged in during working hours. Whatever physiological effect it has is sedative, and so obstructs mental operations."

Manual of Diet in Health and Disease. 1876, *p.* 162.

Professor THOMAS R. FRASER,

Edinburgh.

"The stimulating action on the brain of quantities far short of intoxicating, is accompanied with a paralysing action which seems most rapidly and powerfully to involve the higher faculties. Mental work may seem to be rendered more easy, but ease is gained at the expense of quality. The editor of a newspaper will tell you that, if he has been dining out, he cannot with confidence write a leading article unt he has allowed

sufficient time to elapse from the effect of the wine he has drunk, in moderation, to pass away; and even the novelist, whose brain-work is in the regions of imagination, will relate a similar experience. . . . . In a person accustomed to the use of tobacco the intellectual work is difficult when smoking cannot be indulged in, the mind cannot easily be concentrated on a subject, and unrest is produced—but this disappears when recourse is had to smoking; and probably some of its reputation as a soothing agent has on this account been acquired. The circulation is also a little excited, and no doubt this assists in rendering brain work more easy. In a short time, however, the circulation is slightly depressed, the pulse becoming smaller; and this may assist in producing the soothing effect generally experienced."

The Use and Abuse of Alcoholic Stimulants and Tobacco. 1881

HUBERT HERKOMER, A.R.A.

"It is no credit to me for being an abstainer. The credit is due to my father, who gave up smoking, drinking intoxicating drinks, and eating meat at the same time, about twenty years ago; and as I was only ten years old then, I naturally grew into my father's habits (I now eat meat, however). The blessings of that reform have come down upon my children."

Sherlock's *Heroes in the Strife.*

COLONEL THOMAS WENTWORTH HIGGINSON.

"I have been a busy worker with the brain all my life, and have enjoyed very unusual health. I am now fifty-three, and have not been confined to the house by illness since I was seventeen, except for a short time during the war, when suffering from the results of a wound. This favourable result I attribute to (1) a good constitution and an elastic temperament; (2) simple tastes, disinclining me to stimulants and narcotics, such

as tea, coffee, wine, spirits, and tobacco; (3) a love of athletic exercises; (4) a life-long habit of writing by daylight only; (5) the use of homœopathic medicines in the early stages of slight ailments. I have never been a special devotee of health, I think, but have followed out my natural tastes; and have certainly enjoyed physical life very much. It may be well to add that, though, as I said, my constitution was good and my frame always large, I had yet an unusual number of children's diseases, and have often been told that my life was several times preserved, in infancy, against all expectation, by the unwearied care and devotion of my mother. This may encourage some anxious parents."

Nov. 11, 1877.

Hygiene of the Brain. N.Y., 1878.

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WILLIAM HOWITT.

I have read with very great pleasure the letter of Mr. Bryant . . . . Let me observe that while the modes of my own life and those of Mr. Bryant very

much accord, in a few particulars they differ, as, I suppose, must be the case in almost any two individuals. Mr. Bryant never takes coffee or tea. I regularly take both, find the greatest refreshment in both, and never experienced any deleterious effects from either, except in one instance, when, by mistake, I took a cup of tea strong enough for ten men. On the contrary, tea is to me a wonderful refresher and reviver. After long-continued exertion, as in the great pedestrian journeys that I formerly made, tea would always, in a manner almost miraculous, banish all my fatigue, and diffuse through my whole frame comfort and exhilaration, without any subsequent evil effect.

I am quite well aware that this is not the experience of many others, my wife among the number, on whose nervous system tea acts mischievously, producing inordinate wakefulness, and its continued use, indigestion. But this is one of the things that people should learn, and act upon, namely, to take such things as suit them, and avoid such as do not. It is said that Mithridates could live and flourish on poisons, and if it be true that tea or coffee is a poison, so do most of us. William Hutton, the shrewd and humorous author of the histories of Birmingham and Derby, and also of a life of himself, scarcely inferior to that of Franklin in

lessons of life-wisdom, said that he had been told that coffee was a slow poison, and, he added, that he had found it very slow, for he had drunk it more than sixty years without any ill effect. My experience of it has been the same.

Mr. Bryant also has recourse to the use of dumb-bells, and other gymnastic appliances. For my part, I find no artificial practices necessary for the maintenance of health and a vigorous circulation of the blood. My only gymnastics have been those of Nature—walking, riding, working in field and garden, bathing, swimming, etc. In some of those practices, or in the amount of their use, Nature, in my later years, has dictated an abatement. In Mr. Bryant's abhorrence of tobacco, I fully sympathize. That is a poisoner, a stupefier, a traitor to the nervous system, and, consequently, to energy and the spirit of enterprise, which I renounced once and for ever before I reached my twentieth year.

The main causes of the vigor of my constitution and the retention of sound health, comfort, and activity to within three years of eighty, I shall point out as I proceed. First and foremost, it was my good fortune to derive my existence from parents descended on both sides from a vigorous stock, and of great longevity. I remember my great-grandmother, an old lady of nearly

ninety; my grandmother of nearly as great an age. My mother lived to eighty-five, and my father to the same age. They were both of them temperate in their habits, living a fresh and healthy country life, and in enjoyment of that tranquillity of mind which is conferred by a spirit of genuine piety, and which confers, in return, health and strength.

The great destroyers of life are not labor and exertion, either physical or intellectual, but care, misery, crime, and dissipation. My wife derived from her parentage similar advantages, and all the habits of our lives, both before and since our marriage, have been of a similar character. My boyhood and youth were, for the most part, spent in the country; and all country objects, sports, and labors, horse-racing and hunting excepted, have had a never-failing charm for me. As a boy, I ranged the country far and wide in curious quest and study of all the wild creatures of the woods and fields, in great delight in birds and their nests, climbing the loftiest trees, rocks and buildings in pursuit of them. In fact, the life described in the "Boy's Country Book," was my own life. No hours were too early for me, and in the bright, sunny fields in the early mornings, amid dews and odour of flowers, I breathed that pure air which gave a life-long tone to my lungs that I still reap

the benefit of. All those daily habits of climbing, running, and working developed my frame to perfection, and gave a vigor to nerve and muscle that have stood well the wear and tear of existence. My brain was not dwarfed by excessive study in early boyhood, as is too much the case with children of to-day. Nature says, as plainly as she can speak, that the infancy of all creatures is sacred to play, to physical action, and the joyousness of mind that give life to every organ of the system. Lambs, kittens, kids, foals, even young pigs and donkeys, all teach the great lesson of Nature, that to have a body healthy and strong, the prompt and efficient vehicle of the mind, we must not infringe on her ordinations by our study and cramping sedentariness in life's tender years. We must not throw away or misappropriate her forces destined to the corporeal architecture of man, by tasks that belong properly to an after-time. There is no mistake so fatal to the proper development of man and woman, as to pile on the immature brain, and on the yet unfinished fabric of the human body, a weight of premature and, therefore, unnatural study. In most of those cases where Nature has intended to produce a first-class intellect, she has guarded her embryo genius by a stubborn slowness of development. Moderate study and plenty of play and

exercise in early youth are the true requisites for a noble growth of intellectual powers in man, and for its continuance to old age.

My youth, as my boyhood, was spent in the country, and in the active exercise of its sports and labors. I was fond of shooting, fishing, riding, and walking, often making long expeditions on foot for botanical or other purposes. Bathing and swimming I continued each year till the frost was in the ground and the ice fringed the banks of the river. As my father farmed his own land, I delighted in all the occupations of the field, mowing and reaping with the men through the harvest, looking after sheep and lambs, and finding never-ceasing pleasure in the cultivation of the garden.

When our literary engagements drew us to London, we carefully avoided living in the great Babel, but took up our residence in one of its healthy suburbs, and, on the introduction of railways, removed to what was actual country. A very little time showed us the exhausting and unwholesome nature of city life. Late hours, heavy dinners, the indulgence of what are called jovial hours, and crowded parties, would soon have sent us whither they have sent so many of our literary contemporaries, long, long ago. After an evening spent in one of the crowded parties of London, I have always

found myself literally poisoned. My whole nervous system has been distressed and vitiated. I have been miserable and incapable the next day of intellectual labor. Nor is there any mystery about this matter. To pass some four or five hours in a town, itself badly ventilated, amid a throng of people just come from dinner, loaded with a medley of viands, and reeking with the fumes of hot wines—no few of them, probably, of very moral habits, was simply undergoing a process of asphyxia. The air was speedily decomposed by so many lungs. Its ozone and oxygen were rapidly absorbed, and in return the atmosphere was loaded with carbonic acid, carbon, nitrogen, and other effluvia, from the lungs and pores of the dense and heated company; this mischievous matter being much increased from the products of the combustion of numerous lamps, candles, and gas-jets.

The same effect was uniformly produced on me by evenings passed in theatres, or crowded concert or lecture rooms. These facts are now well understood by those who have studied the causes of health and disease in modern society; and I am assured by medical men that no source of consumption is so great as that occasioned by the breathing of these lethal atmospheres of fashionable parties, fashionable theatres, and concert

and lecture halls; and then returning home at midnight by an abrupt plunge from their heat into damp and cold. People have said to me, "Oh! it is merely the effect of the unusual late hour that you have felt!" But, though late hours, either in writing or society, have not been my habit, when circumstances of literary pressure have compelled me occasionally to work late, I have never felt any such effects. I could rise the next day a little later, perfectly refreshed and full of spirit for my work.

Another cause to which I attribute my extraordinary degree of health, has been not merely continued country exercise in walking and gardening, but, now and then, making a clean breach and change of my location and mode of life. Travel is one of the great invigorators of the system, both physically and intellectually. When I have found a morbid condition stealing over me, I have at once started off on a pedestrian or other journey. The change of place, scene, atmosphere, of all the objects occupying the daily attention, has at once put to flight the enemy. It has vanished as by a spell. There is nothing like a throwing off the harness and giving mind and body a holiday—a treat to all sorts of new objects. Once, a wretched, nervous feeling grew upon me; I flung it off by mounting a stage-coach, and

then taking a walk from the Land's End, in Cornwall, to the north of Devon. It was gone for ever! Another time the "jolly" late dinners and blithely-circulating decanter, with literary men, that I found it almost impossible to avoid altogether without cutting very valuable connections, gave me a dreadful dyspepsia. I became livingly sensible of the agonies of Prometheus with the daily vulture gnawing at his vitals. At once I started with all my family for a year's sojourn in Germany, which, in fact, proved three years. But the fiend had left me the very first day. The moment I quitted the British shore, the tormentor quitted me. I suppose he preferred staying behind, where he was aware of so many promising subjects of his diabolical art. New diet, new and early hours, and all the novelties of foreign life, made his approach to me impossible. I have known him no more, during these now thirty years.

Eighteen years ago I made the circumnavigation of the globe, going out to Australia by the Cape of Good Hope, and returning by Cape Horn. This, including two years of wandering in the woods and wilds of Australia, evidently gave a new accession of vital stamina to my frame. It is said that the climate of Australia makes young men old, and old men young.

I do not believe the first part of the proverb, but I am quite certain that there is a great deal in the second part of it. During those two years I chiefly lived in a tent, and led a quiet, free, and pleasant life in the open forests and wild country, continually shifting our scene as we took the fancy, now encamping in some valley among the mountains, now by some pleasant lake or river. In fact, pic-nicing from day to day, and month to month, watching, I and my two sons, with ever new interest, all the varied life of beast, bird, and insect, and the equally varied world of trees, shrubs, and flowers. My mind was lying fallow, as it regarded my usual literary pursuits, but actually engaged with a thousand things of novel interest, both among men in the Gold Diggings, and among other creatures and phenomena around me. In this climate I and my little party enjoyed, on the whole, excellent health, though we often walked or worked for days and weeks under a sun frequently, at noon, reaching from one hundred to one hundred and fifty degrees of Fahrenheit; waded through rivers breast high, because there were no bridges, and slept occasionally under the forest trees. There, at nearly sixty years of age, I dug for gold for weeks together, and my little company discovered a fine gold field which continues one to this day. These

two years of bush life, with other journeys on the Australian Continent, and in Tasmania, and the voyages out and back, gave a world of new vigor that has been serving me ever since. During the last summer in Switzerland, Mrs. Howitt and myself, at the respective ages of sixty-eight and seventy-six, climbed mountains of from three to five thousand feet above the level of the sea, and descended the same day with more ease than many a young person of the modern school could do.

As to our daily mode of life, little need be said. We keep early hours, prefer to dine at noon, are always employed in "books, or work, or healthful play;" have no particular rules about eating and drinking, except the general ones of having simple and good food, and drinking little wine. We have always been temperance people, but never pledged, being averse to thraldom of any kind, taking, both in food and drink, what seemed to do us good. At home, we drink, for the most part, water, with a glass of wine occasionally. On the Continent, we take the light wines of the country where we happen to be, with water, because they suit us; if they did not, we should eschew them. In fact, our great rule is to use what proves salutary, without regard to any theories, conceits, or speculations of

hygienic economy; and, in our case, this following of common sense has answered extremely well.

At the same time it is true that many eminent men, and especially eminent lawyers, who in their early days worked immensely hard, studied through many long nights, and caroused, some of them, deeply through others, yet attained to a good old age, as Lords Eldon, Scott, Brougham, Campbell, Lyndhurst, and others. To what are we to attribute this longevity under the circumstances? No doubt to iron constitutions derived from their parentage, and then to the recuperative effect of those half-yearly flights into the Egypt of the country, which make an essential part of English life. To a thorough change of hours, habits, and atmosphere in these seasons of villeggiatura. To vigorous athletic country sports and practices, hunting, shooting, fishing, riding, boating, yachting, traversing moors and mountains after black-cock, grouse, salmon, trout and deer. To long walks at sea-side resorts, and to that love of continental travel so strong in both your countrymen and women, and ours.

These are the *saving* causes in the lives of such men. Who knows how long they would have lived had they not inflicted on themselves, more or less, the destroying ones. There is an old story among us of two very old

men being brought up on a trial where the evidence of "the oldest inhabitant" was required. The Judge asked the first who came up what had been the habits of his life. He replied, "Very regular, my lord; I have always been sober, and kept good hours." Upon which the Judge dilated in high terms of praise on the benefit of regular life. When the second old man appeared, the Judge put the same question, and received the answer, "Very regular, my lord; I have never gone to bed sober these forty years." Whereupon his lordship exclaimed, "Ha! I see how it is. English men, like English oak, wet or dry, last for ever."

I am not of his lordship's opinion; but seeing the great longevity of many of our most eminent lawyers, and some of whom in early life seemed disposed to live fast rather than long, I am more than ever confirmed in my opinion of the vitalizing influences of temperance, good air, and daily activity, which, with the benefits of change and travel, can so far in after life save those whom no original force of constitution could have saved from the effects of jollity, or of gigantic efforts of study in early life. For one of such hard livers, or hard brain-workers who have escaped by the periodical resort to healthful usages, how many thousands have been "cut off in the midst of their days?"

A lady once meeting me in Highgate, where I then lived, asked me if I could recommend her a good doctor. I told her that I could recommend her three. She observed that one would be enough; but I assured her that she would find these three more economical and efficient than any individual Galen that I could think of. Their names were, "Temperance, Early Hours, and Daily Exercise." That they were the only ones that I had employed for years, or meant to employ. Soon after, a gentleman wrote to me respecting these "Three Doctors," and put them in print. Anon, they were made the subject of one of the "Ipswich Tracts;" and on a visit, a few years ago, to the Continent, I found this tract translated into French, and the title-page enriched with the name of a French physician, as the author. So much the better. If the name of the French physician can recommend "The Three Doctors" to the population of France, I am so much the more obliged.

May 20, 1871.

Hygiene of the Brain, New York, 1878.

The Rev. CHARLES KINGSLEY

Found great benefit from the use of tobacco, though several times he tried to give it up. He smoked the poorest tobacco, however, and Mr. C. Kegan Paul thus describes the care Charles Kingsley took to minimise the dangers of the habit :—

" He would work himself into a white heat over his book, till, too excited to write more, he would calm himself down by a pipe, pacing his grass-plot in thought, and in long strides. He was a great smoker, and tobacco was to him a needful sedative. He always used a long and clean clay pipe, which lurked in all sorts of unexpected places. But none was ever smoked which was in any degree foul, and when there was a vast accumulation of old pipes, they were sent back again to be rebaked, and returned fresh and new. This gave him a striking simile, which in ' Alton Locke,' he puts into the mouth of James Crossthwaite, ' Katie here believes in Purgatory, where souls are burnt clean again, like ' bacca pipes.' "

HARRIET MARTINEAU.

I was deeply impressed by something which an excellent clergyman told me one day, when there was nobody by to bring mischief on the head of the narrator. This clergyman knew the literary world of his time so thoroughly that there was probably no author of any mark then living in England with whom he was not more or less acquainted.

It must be remembered that a new generation has now grown up. He told me that he had reason to believe that there was no author or authoress who was free from the habit of taking pernicious stimulants, either strong green tea or strong coffee at night, or wine, or spirits, or laudanum.

The amount of opium taken to relieve the wear and tear of authorship was, he said, greater than most people had any conception of, and all literary workers took something.

"Why, I do not," said I; "fresh air and cold water are my stimulants."

"I believe you," he replied, "but you work in the morning, and there is much in that!"

I then remembered, when I had to work a short time at night, a physician who called on me observed that I

must not allow myself to be exhausted at the end of the day. He would not advise any alcoholic wines, but any light wines that I liked might do me good. "You have a cupboard there at your right hand," said he; "keep a bottle of hock and a wine glass there, and help yourself when you feel you want it." "No, thank you," said I; "if I took wine it should not be when alone, nor would I help myself to a glass; I might take a little more and a little more, till my solitary glass might become a regular tippling habit; I shall avoid the temptation altogether." Physicians should consider well before they give such advice to brain-worn workers.—*Autobiography.*

PROFESSOR MILLER.

"In labour of the head, alcohol stimulates the brain to an increase of function under the mental power, and so effects a concentrated cerebral exhaustion, without being able to afford compensating nutrition or repair. . . . . There is the same common fallacy here as

in the case of manual labour. The stimulus is felt to do good. 'I could not do my work without it.' But at what cost are you doing your work? Premature and permanent exhaustion of the muscles is bad enough; but premature and permanent exhaustion of brain is infinitely worse. And when you come to a point where work must cease or the stimulus be taken, do not hesitate as to the right alternative. Don't call for your pale ale, your brandy, or your wine. Shut your book, close your eyes, and go to sleep: or change your occupation, so as to give a thorough shift to your brain; and then, after a time, spent, as the case may be, either in repose or recreation, you will find yourself fit to resume your former task of thought without loss or detriment. . . . . Look to the mental workers under alcohol. Take the best of them. Would not their genius have burned not only with a steadier and more enduring flame, but also with a less sickly and noxious vapour to the moral health of all around them, had they been free from the unnatural and unneeded stimulus? Take Burns, for example. Alcohol did not make his genius, or even brighten it. . . . . Genius may have its poetical and imaginative powers stored up into fitful paroxysms by alcohol, no doubt: the control of will being gone or

going, the mind is left to take ideas as they come, and they may come brilliantly for a time. But, at best, the man is but a revolving light. At one time a flash will dazzle you; at another, the darkness is as that of midnight; the alternating gloom being always longer than the period of light, and all the more intense by reason of the other's brightness. While imagination sparkles, reason is depressed. And, therefore, let the true student eschew the bottle's deceitful aid. He will think all the harder, all the clearer, and all the longer!"

Alcohol: its Place and Power. 1866, p. 122.

Mr. R. A. PROCTOR, F.R.S.,

"I would venture to add an expression of my own firm conviction that a life of study is aided by the almost entire avoidance of stimulants, alcoholic as well as nicotian. I do not say that the moderate use of such stimulants does harm, only that so far as I can judge from my own experience it affords no help. I recognise a slight risk in what Abbé Moigno correctly

states—the apparent power of indefinite work which comes with the almost entire avoidance of stimulants ; but the risk is very slight, for the man must have very little sense who abuses that power to a dangerous degree. Certainly, if the loss of the power be evidence of mischief, I would say (still speaking of my own experience, which may be peculiar to my own temperament) that the use of stimulants, even in a very moderate degree, is mischievous. For instance, I repeatedly have put this point to the test :—I work say from breakfast till one o'clock, when, if I feel at all hungry, I join my family at lunch ; if now at lunch I eat very lightly, and take a glass of ale or whisky-and-water, I feel disposed, about a quarter of an hour later, to leave my work, which has, for the time, become irksome to me ; and perhaps a couple of hours will pass before I care for steady work again : on the other hand, if I eat as lightly, or perhaps take a heartier lunch, but drink water only, I sit down as disposed for work after as before the meal. In point of fact, a very weak glass of whisky-and-water has as bad an influence on the disposition for work as a meal unwisely heavy would have. It is the same in the evening. If I take a light supper, with water only, I can work (and this, perhaps, is bad) comfortably till twelve or one ; but a glass of

weak whisky-and-water disposes me to rest or sleep, or to no heavier mental effort than is involved in reading a book of fiction or travel. These remarks apply only to quiet home life, with my relatives or intimate friends at the table. At larger gatherings it seems (as Herbert Spencer has noted) that not only a heartier meal, but stimulants in a larger quantity, can be taken without impairment of mental vivacity, and even with advantage, up to a point falling far short, however, of what in former times would have been regarded as the safe limit of moderation. Under those circumstances, "wine maketh glad the heart of man," and many find the stimulus it gives pleasant,—perhaps dangerously so, unless the lesson is soon learned that the point is very soon reached beyond which mental vivacity is not increased but impaired.

I must confess it seems to me that if we are to admit the necessity or prudence of adopting total abstinence principles, because of the miseries which have been caused by undue indulgence—if A, B, and C, who have no desire to make beasts of themselves, are to refrain from the social glass because X, Y, and Z cannot content themselves till they have taken half-a-dozen social glasses too many—society has an additional reason to be angry with the drunkards, and with those

scarcely less pernicious members of the social body who either cannot keep sober without blue ribbons or pledges, or, having no wish to drink, want everyone to know it. I admit, of course, if it really is the case that the healthy-minded must refrain from the innocent use of such stimulants as suit them, in the interest of the diseased, it may be very proper and desirable to do so: but only in the same way that it might be very desirable to avoid in a lunatic asylum the rational discussion of subjects about which the lunatics were astray. For steady literary or scientific work, however, and throughout the hours of work (or near them), it is certain that for most men something very close to total abstinence from stimulants is the best policy."

Knowledge, July, 29, 1882.

"I have recently had rather interesting evidence of the real value of the use of so-called stimulants. When lecturing daily, and also travelling long distances, I always adopt a very light diet: tea, dry toast, and an egg for breakfast; nothing then till six, when I take tea, dry toast, and a chop; after lecturing I take a biscuit or so with cheese, and a glass of whisky-and-water, 'cold without.' I tried this season the effect of omitting the whisky. Result—sleeplessness till one or

two in the morning. No other harm, but weariness during following day. Taking the whisky-and-water again, after trying this a night or two, acted as the most perfect sedative.

Knowledge, Dec. 1, 1882.

Dr. B. W. RICHARDSON, F.R.S.

The evidence is all perfect that alcohol gives no potential power to brain or muscle. During the first stage of its action it may enable a wearied or a feeble organism to do brisk work for a short time; it may make the mind briefly brilliant: it may excite muscle to quick action, but it does nothing substantially, and fills up nothing it has destroyed, as it leads to destruction. A fire makes a brilliant sight, but leaves a desolation. It is the same with alcohol. . . . . The true place of alcohol is clear; it is an agreeable temporary shroud. The savage, with the mansions of his soul unfurnished, buries his restless energy under its shadow. The

civilised man, overburdened with mental labour, or with engrossing care, seeks the same shade; but it is shade, after all, in which in exact proportion as he seeks it, the seeker retires from perfect natural life. To search for force in alcohol is, to my mind, equivalent to the act of seeking for the sun in subterranean gloom until all is night. . . . . In respect to the influence of smoking on the mental faculties, there need, I believe, be no obscurity. When mental labour is being commenced, indulgence in a pipe produces in most persons a heavy, dull condition, which impairs the processes of digestion and assimilation, and suspends more or less that motion of the tissues which constitutes vital activity. But if mental labour be continued for a long time, until exhaustion be felt, then the resort to a pipe gives to some *habitués* a feeling of relief; it soothes, it is said, and gives new impetus to thought. This is the practical experience of almost all smokers, but few men become so habituated to the pipe as to commence well a day of physical or mental work on tobacco. Many try, but it almost invariably obtains that they go through their labours with much less alacrity than other men who are not so addicted. The majority of smokers feel that after a hard day's labour, a pipe, supposing always that the indulgence of

it is moderately carried out, produces temporary relief from exhaustion."

Diseases of Modern Life.

"I gave up that which I thought warmed and helped me, and I can declare, after considering the whole period in which I have subjected myself to this ordeal, I never did more work; I never did more varied work; I never did work with so much facility; I never did work with such a complete sense of freedom from anxiety and worry, as I have done during the period that I have abstained altogether."

Speech at Exeter Hall, Feb. 7, 1877.

Mr. GEORGE AUGUSTUS SALA.

"As to smoking stupefying a man's faculties or blunting his energy, that allegation I take to be mainly nonsense. The greatest workers and thinkers of modern times have been inveterate smokers. At the same time, it is idle to deny that smoking to excess

weakens the eyesight, impairs the digestion, plays havoc with the nerves, and interferes with the action of the heart. I have been a constant smoker for nearly forty years; but had I my life to live over again I would never touch tobacco in any shape or form. It is to the man who sits all day long at a desk, poring over books and scribbling 'copy,' that smoking is deleterious."

Illustrated London News, Sep. 30, 1882.

Bishop TEMPLE.

"I can testify that since I have given up intoxicating liquors I have felt less weariness in what I have to do. I have been busy ever since I was a little boy, and I therefore know how much I can undertake, and I certainly can testify that since I gave up intoxicating liquors—although I did not like the giving them up, inasmuch as I rather enjoyed them, when I used them, and inasmuch as I never felt the slightest intention to exceed, nor am I at all among those who cannot take one glass, and only one, but must go on to another—I

have certainly found that I am very much the better for it. Whatever arguments I may hear about it, it is impossible for me to escape from the memory of the fact that I have found myself very much better able to work, to write, to read, to speak, and to do whatever I may have to do, ever since I abstained totally and entirely from all intoxicating liquor."

Speech at Torquay, Sept. 10, 1882.

Sir HENRY THOMPSON, F.R.C.S.,

Surgeon-Extraordinary to the King of the Belgians.

"I will tell you who can't take alcohol, and that is very important in the present day. Of all the people I know who cannot stand alcohol, it is the brain-workers; and you know it is the brain-workers that are increasing in number, and that the people who do not use their brains are going down, and that is a noteworthy incident in relation to the future. I find that the men who live indoors, who have sedentary habits, who

work their nervous systems, and who get irritable tempers, as such people always do, unless they take a large balance of exercise to keep them right (which they rarely do), I say that persons who are living in these fast days get nervous systems more excitable and more irritable than their forefathers, and they cannot bear alcohol so well."

Speech at Exeter Hall, Feb. 7, 1877.

MR. W. MATTIEU WILLIAMS, F.R.A.S., F.C.S.

"I have just read your quotations from the Abbé Moigno, and your own comments thereon. I have tried experiments very similar to those you describe, with exactly the same results; in fact, so far as intellectual work is concerned, I might describe my own experience by direct plagiarism of your words.

Besides these, I have tried other experiments which may be interesting to those who, without any partizan fanaticism, are seeking for practical guidance on this subject.

As many of your readers may know, I have been (when of smaller girth) an energetic pedestrian, have walked over a large part of England, Scotland, Wales, and Ireland, crossed France twice on foot, done Switzerland and the Tyrol pretty exhaustively; in one walk from Paris taking in on the way the popular lions of the Alps, and then proceeding, *via* Milan and Genoa, to Florence, Rome, Naples, and Calabria, then from Messina to Syracuse, aud on to the East. All this, excepting the East, on foot. At another time from Venice to Milan, besides a multitude of minor tours, and my well-known walk through Norway.

In the course of these, my usual average rate, when in fair training, was 200 miles per week. The alcohol experiments consisted in doing a fortnight at this rate on water, scrupulously abstaining from any alcoholic drink whatever, and then a fortnight using the beverages of the country in ordinary moderate quantity. I have thus used British ales and porter, Bavarian beer, French wines, Italian wines, Hungarian wine in the Tyrol, Christiania öl, &c., according to circumstances, and the result has been the same, or with very little variation. With the stimulant I have, of course, obtained a temporary exhilaration that was pleasant enough while it lasted, but after the first week I found

myself dragging through the last few miles, and quite able to appreciate the common habit of halting at a roadside "pub." or wine-shop, for a drink on the way. No such inclination came upon me when my only beverage was water, or water plus a cup of coffee for breakfast *only* (no afternoon tea). Then I came in fresh, usually finishing at the best pace of the day, enjoying the brisk exercise in cool evening air. Physical work of this kind admits of accurate measurement, and I was careful to equalise the average of these experimental comparative fortnights.

The result is a firm conviction that the only beverage for obtaining the maximum work out of any piece of human machinery is water, as pure as possible; that all other beverages (including even tea and coffee), ginger-beer, and all such concoctions as the so-called "temperance drinks," are prejudicial to anybody not under medical treatment. To a sound-bodied man there is no danger in drinking any quantity of cold water in the hottest weather, provided *it is swallowed slowly*. I have drunk as much as a dozen quarts in the course of a stiff mountain climb when perspiring profusely, and never suffered the slightest inconvenience, but, on the contrary, have found that the perspiration promoted by frequent and copious libations at the

mountain streams enabled me to vigorously enjoy the roasting heat of sun-rays striking so freely and fiercely as they do through the thin air on the southward slopes of a high mountain.

I am not a teetotaler, and enjoy a glass of light wine, but always take it as I sucked lollypops when a child, not because "it is good for my complaint," or any such humbug, but simply because I am so low in the scale of creation, as imperfect, as far from angelic, as to be capable of occasionally enjoying a certain amount of purely sensual indulgence, and of doing so from nothing higher than purely sensual motives.

If all would admit this, and freely confess that their drinking or smoking, however moderate, is simply a folly or a vice, they would be far less liable to go to excess than when they befool themselves by inventing excuses that cover their weaknesses with a flimsy disguise of medicinal necessity, or other pretended advantage. In all such cases the physical mischief of the alcohol is supplemented by the moral corruption of habitual hypocrisy."

Knowledge, August 18, 1882.

Dr. BURNEY YEO, M.D.

"With regard to the effect of moderate doses of alcohol on mental work much difference of opinion exists. Many students find that, instead of helping them in their work, it hinders them. It dulls their receptive faculties. Others, on the contrary, find real help in moderate quantities of wine. These differences of effect would seem to depend greatly on differences in constitutional temperament. It is certainly capable, for a time, of calling some of the mental faculties into increased activity. Some of the best things that have ever been said have been said under the influence of wine. The circulation through the brain is quickened, the nervous tissue receives more nourishment, the imagination is stimulated, and ideas flow more rapidly, but it is doubtful if the power of close reasoning be not always diminished. It is useful for reviving mental power, when from accidental circumstances, such as want of food, &c., it has been exhausted, but it should never be relied upon as an aid to continuous effort or close application."

Fortnightly Review. Vol. 21, *p.* 547.

CONCLUSION.

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FROM a review of the 124 testimonies, including those which appear in the Appendix, I find that 25 use wine at dinner only; 30 are abstainers from all alcoholic liquors; 24 use tobacco, out of which only 12 smoke whilst at work; one chews and one took snuff. Not one resorts to alcohol for stimulus to thinking, and only two or three defend its use under special circumstances—"useful at a pinch," under "physical or mental exhaustion." "Not one resorts to alcohol" for inspiration. This is an important discovery, and indicates the existence of more enlightened views in reference to the value of alcohol, since Burns sang the praise of whisky:—"It kindles wit and waukens lear." That some literary men still "support" themselves by alcoholic stimulants, is no doubt true; and, if M. Taine is not mistaken, some of the leader writers of the London papers can write their articles only by the aid of a bottle of champagne. When the creative faculty flags, or the attention wanders, a writer, who is working against time, is strongly tempted to fly to stimulants for aid.

But leader writing, or any other kind of writing, done under the influence of any kind of stimulants, is, remarks Blackie, unhealthy work, and tends to no good. "It may safely be affirmed," thinks the editor of the *Contemporary Review*, "that no purely conscientious writing was *ever* produced under stimulation from alcohol. Harriet Martineau was one of those workers who could not write a paragraph without asking herself, 'Is that wholly true? Is it a good thing to say it? Shall I lead anyone astray by it? Had I better soften it down, or keep it back? Is it as well as I can say it?' Writing like that of Wilson's 'Noctes,' or Hoffman's madder stories, may be produced under the influence of wine, but 'stuff of the conscience', not." The workman himself is injured, as well as the quality of his work lessened. Mr. Hamerton says he has seen terrible results from the use of stimulants at work; and anyone who has read literary history, or who has had any experience of literary life in London, knows that the rock upon which many men split is—drink. Whatever journalists may gain from alcohol, other writers who have tried it say nothing in its favour. Mr. Howells does not take wine at all, because it weakens his work and his working force. To Mark Twain wine is a clog to the pen, not an

inspiration. "I have," he says, "never seen the time when I could write to my satisfaction after drinking even one glass of wine." Dr. Bain finds abstinence from alcohol and the tea group essential to intellectual effort. They induce, he says, a false excitement, not compatible with severe application to problems of difficulty; and the experience of other workers, whether literary or scientific, is precisely similar. But the use of alcoholic stimulants at work is one thing; at dinner, another. The former practice is absolutely injurious; and the highest medical authorities have pronounced against the latter. Some of the most vigorous thinkers and laborious workers, however, find that wine aids digestion and conduces to their power of work. To Mr. Gladstone it is "especially necessary at the time of greatest intellectual exertion." As a rule, it is taken at the end of the day, when work is over; but when he resumes literary composition the quality of a writer's work seems deteriorated. One of the most esteemed novelists of the present day informs Dr. Brunton that, although he can take a great deal of wine without its having any apparent effect on him, yet a single glass of sherry is enough to take the fine edge off his intellect. He is able to write easily and fluently in the evening, after taking dinner and wine, but what he then writes

will not bear his own criticism next morning, although curiously enough it may seem to him excellent at the time of writing. The perception of the fingers, as well as the perception of the mind, seems blunted by the use of alcohol. Dr. Alfred Carpenter relates that a celebrated violin player, as he was about to go on the platform, was asked if he would take a glass of wine before he appeared, "Oh, no, thank you," he replied, "I shall have it when I come off." This answer excited Mr. Carpenter's curiosity, and he inquired of the violinist why he would have it when he came off in preference to having it before his work commenced, and the reply was, "If I take stimulants before I go to work, the *perception of my fingers is blunted*, and I don't feel that nicety and delicacy of touch necessary to bring out the fine tones requisite in this piece of music, and therefore I avoid them." "But to touch these things is dangerous," says Mr. Hubert Bancroft, though less dangerous to touch them *after* work than *before* work. The most careful man is sometimes thrown off his guard, and drinks more than his usual allowance. It is, Mr. Watts believes, an admitted fact that even people who are considered strictly temperate habitually take more than is good for them. What quantity *is* good for every man, no one can say with certainty. So

far as wine is taken to aid digestion, Blackie, who considers that wine "may even be necessary to stimulate digestion," holds that "healthy *young* men can never require such a stimulus."

A belief exists that men who abstain from alcohol indulge to excess in some other stimulant. There is some foundation for this belief. Balzac, for instance, abstained from tobacco, which he declared injured the body, attacked the intellect, and stupefied the nations; but he drank great quantities of coffee, which produced the terrible nervous disease which shortened his life. Göethe was a non-smoker, but, according to Bayard Taylor, he drank fifty thousand bottles of wine in his life-time. Niebuhr greatly disliked smoking, but took a tremendous quantity of snuff. A great number of teetotalers "make up for their abstinence from alcohol by excessive indulgence in tobacco," and abuse their more consistent brethren who venture to expostulate with them. John Stuart Mill "believed that the giving up of wine would be apt to be followed by taking more food than was necessary, merely for the sake of stimulation." Sir Theodore Martin, also, thinks the absence of alcohol likely to lead to increased eating, and to an extent likely to cause derangement of the body. The power of alcohol to arrest and preserve

decomposition may, it is admitted by temperance writers, retard to some extent the waste of animal tissue, and diminish accordingly the appetite for food; but they contend that the effete matter which has served its purpose and done for the body all that it can do is retained in the body to its loss and damage. "The question comes to be," says Professor Miller, "whether shall we take alcohol, eat less, and be improperly nourished, or take no alcohol, eat more, and be nourished well? Whether shall we thrive better on a small quantity of new nutritive material with a great deal of what is old and mouldy, or on a constant and fresh supply of new material? . . . The most perfect health and strength depend on frequent and complete disintegration of tissue with a corresponding constant and complete replacement of the effete parts by the formation of new material."

"This is not a question which can be settled by reasoning: it must be decided entirely by experience. No one who has always been in the habit of using stimulants can be heard on this point, because, having had no experience of life without alcohol, such a person cannot draw a comparison between life with and life without that agent." These are the words of Dr. Buckle, of London, Ontario, and this practical way of

testing the question will commend itself to all. What is the experience, then, of those who have tried both moderation and total abstinence? The Rev. Canon Farrar found that "even a single glass of wine, when engaged in laborious work, was rather injurious than otherwise." Mr. A. J. Ellis did not find that wine increased his power of work, and Professor Skeat says the less stimulant he takes the better. Contrary to medical advice, Dr. Martineau reverted to abstinence, and for twelve or fifteen years he has been practically a total abstainer, and, at 77, he retains the power of mental application. For many years, the Rev. Mark Pattison found great advantage from giving up wine. Lieutenant-Colonel Butler finds that a greater amount of *even* mental work is to be obtained without the use of alcohol. The belief that alcohol invigorated the body was held by Mr. Cornelius Walford, but he now finds that it does not do so, and believes that in sedentary occupations it is positively injurious even when taken with meals. Professor Skeat has given up beer with benefit to himself, and has almost given up wine. M. Barthelemy St. Hilaire has abstained from wine for many years, indeed, for nearly a life-time, with great advantage. Mr. Hamerton has abstained for long periods from stimulants, feeling better without them.

Mr. Oliver Wendell Holmes's practice approaches nearer to abstinence as he grows older. The Bishop of Durham finds that, on the whole, he can work for more consecutive hours, and with greater application, than when he used stimulants. This, too, is the testimony of Bishop Temple. The Rev. Stopford Brooke is enthusiastic in his praise of total abstinence: it has enabled him to work better; it has increased the pleasure of life; and it has banished depression. Sir Henry Thompson declares himself better without wine, and better able to accomplish his work. Dr. Richardson declares that he never did more work, or more varied work; that he never did work with so much facility, or with such a complete sense of freedom from anxiety and worry as he has done during the period he has abstained from alcohol. On the other hand, Sir Erskine May's experience of abstinence was that it made him "dyspeptic and stupid;" and Dr. W. B. Carpenter "can get on best, while in London, by taking with his dinner a couple of glasses of very light claret, as an aid to digestion." But when on holiday, he says, he does not need it. A *natural* stimulant then takes the place of an *artificial* one; and so long as a man is healthy, eating well, and

sleeping well, he is, Dr. Brunton declares, better without alcohol.

Although there is no comparison between the evils of smoking and those of drinking, most of the writers seem to attach more importance to the question of smoking, and some regard the question of alcohol as of no consequence. Mr. Cornelius Walford considers tobacco a more insidious stimulant than alcoholic beverages. It can, he points out, be indulged in constantly without visible degradation; but surely it saps the mind. Mr. Hyde Clarke is of the same opinion, and remarks, "a man knows when he is drunk, but he does not know when he has smoked too much, until the effects of accumulation have made themselves permanent." There is a growing conviction that tobacco does quite as much harm to the nervous system as alcohol.*

The question is often asked, "Does tobacco shorten

* There can be no room to question the presumption that an excessive use of tobacco *does* occasionally deteriorate the moral character, as the inordinate use of chloral or bromide of potassium may deprave the mind, by lowering the tone of certain of the nervous centres, in narcotising them and impairing their nutrition. Whether the nicotine of the tobacco can act on nerve-cells as alcohol acts may be doubtful, but the victim of excess in the use of tobacco certainly often very closely resembles the habitual drinker of small drams—the tippler who seldom becomes actually drunk—and he readily falls into the same maudlin state as that which seems characteristic of the subject of slow intoxication by chloral, or of the victim of bromide.—*The Lancet*, Nov. 12, 1881.

life?" No evidence has yet been adduced proving that moderate smoking is injurious, though Sir Benjamin Brodie believed that, if accurate statistics could be obtained, it would be found that the value of life in inveterate smokers is considerably below the average; and the early deaths of some of the men whose names are so frequently quoted in defence of smoking, favours the idea that all smoking is injurious. Few literary men live out their days. It is a matter of general belief that Mr. Edward Miall weakened his body and shortened his life through his habit of incessant smoking. "Bayard Taylor," says Mr. James Parton, "was always laughing at me for the articles which I wrote in the *Atlantic Monthly*, one called 'Does it pay to smoke?' and the other, 'Will the Coming Man drink Wine?' I had ventured to answer both these questions in the negative. He, on the contrary, not only drank wine in moderation, but smoked freely, and he was accustomed to point to his fine proportions and rosy cheeks, comparing them with my own meagre form, as an argument for the use of those stimulants. 'Well,' he would say, on meeting me, glancing down at his portly person, and opening wide his arms, with a cigar in his fingers, 'doesn't it pay to smoke? How does *this* look? The coming

man may do as he likes; but the man of the present finds it salutary.'" Commenting on Mr. Taylor's early death, Mr. Parton points out that some fifty New York journalists have either died in their prime or before reaching their prime. A similar mortality, he notes, has been observed in England. Dickens died at 58, and Thackeray at 52. A "great number of lesser lights have been extinguished that promised to burn with long-increasing brightness." Mr. Parton asks, "Is there anything in mental labour hostile to life? Was it over-work that shortened the lives of these valuable and interesting men?" He thinks not, but that they died before their time because they did not know how to live. Like Carlyle, William Howitt was scandalised by the tippling habits of some of the literary men whom he met, and equally scandalised by their smoking habits. Replying to a correspondent who urged that most literary men and artists smoke, he said, "No doubt; and that is what makes the lives of literary men and artists comparatively so short. May not too much joviality and too much smoking have a good deal to do with it? I myself, who have not smoked for these seventy years, have seen nearly the whole generation of my literary contemporaries pass away. The other day (Dec. 7, 1878), I ascended

in the Tyrol, a mountain of 5,000 feet, including a walk of six or seven miles to it, and as many back, in company with some friends. I did it easily, and felt no subsequent fatigue. I would like to see an old smoker of eighty-six do that." There can be no doubt that excessive smoking is one of the causes of the early deaths of literary men, though not the greatest. The opponents of tobacco have tried to make capital out of the early death of Jules Noriac, who is reported to have died of smoker's cancer; but it transpired that he lived very irregularly.* On the other hand, the advocates of

* Considerable difference of opinion would appear to exist among the "chroniqueurs" of the Parisian press as to the real nature of the malady to which M. Jules Noriac, the witty, humorous, and observant writer of "The Hundred and First Regiment," the essay on "Human Stupidity," and numerous dramatic pieces of a more or less ephemeral kind, has just fallen a victim. It has been generally understood that M. Noriac died from a mysterious malady which has not long since been recognised by French physicians as the "smoker's cancer." It is alleged that the deceased man of letters suffered for two whole years from the ravages of this dreadful and occult disease, and that his countenance became so transformed through the wasting action of the ailment that he could scarcely be recognised even by his most intimate friends. This statement, could it be substantiated, would serve as a very powerful argument to those who inveigh against the use of tobacco. Hitherto the fundamental point on which the opponents of the weed have dwelt is that as the active principle of tobacco, nicotine, is acknowledged to be in its isolated form a poison, its introduction into the system in any shape or form must be injurious, and that it is difficult to point to any human organ which may not be detrimentally affected by smoking, snuffing, or chewing. From a cognate point of view, it is worthy of remark that a contemporary, in a curiously interesting study of the originals of the characters in the famous "Scenes de la Vie de Boheme," draws attention to the circumstance that Henri Mürger's consumption

of coffee was so excessive as to bring on fever and delirium. Exhaustion and nervousness followed; and finally he was attacked by an obscure disorder of the sympathetic nerves which control the veins, at times turning his whole body to the colour of purple. The doctors who treated him seem to have known nothing of the ailment, for they dosed him with sulphur and aconite. He died a horrible and very painful death, at the age of thirty-eight. This was in 1860; but only four years afterwards we find the English physician quoted above, Dr. Anstie, in his "Stimulants and Narcotics," recognising "a kind of chronic narcotism, the very existence of which is usually ignored, but which is, in truth, well marked and easy to identify as produced by habitual excess in tea and coffee." The common feature of the disease is muscular tumour; and out of fifty excessive consumers of tea and coffee whose cases were noted by Dr. Anstie, there were only five patients who did not exhibit the symptom named. They were suffering, in fact, from "theine" poisoning. The paralysing effects of narcotic doses of tea was further displayed by a particularly obstinate kind of dyspepsia; while the abuse of coffee disordered the action of the heart to a distressing degree. The friends and biographers of M. Jules Noriac are unanimous as to the fact that he was inveterate in the use of tobacco. He was wont to smoke to the butt-end, one after the other, the huge cigars sold by the French "Régie," and known as "Impériales," and a cynic might opine that if the deceased gentleman had smoked fragrant Havanas in lieu of the abominable stuff vended by the "Régie" he would not have been afflicted with the "cancer des fumeurs," nor with any kindred ailment. He kept fearfully late hours, he worked only at night, and he smoked "all the time." If towards morning he felt somewhat faint he would refresh himself with crusts of bread soaked in cold water, thus imitating to a certain extent our William Prynne, who would from time to time momentarily suspend his interminable scribble to recruit exhausted nature with a moistened crust; only the verbose author of "Histriomastix" used to dip his crusts in strong ale. And the bitter old pamphleteer, for all that his ears had been cropped and his cheeks branded by the Star Chamber, lived to be nearly seventy. Jules Noriac was never to be seen abroad until noon. His breakfast, like that of most Frenchmen, was inordinately prolonged; and afterwards rehearsals, business interviews, dinner, and the play would occupy him until nearly midnight. His delight was to accompany some friend home, and then walk the friend, arm-in-arm, backwards and forwards in front of his, the friend's, door, discoursing of things sublunary and otherwise until two in the morning. Then he would enter his own house and sit down, pipe in mouth, to the

hard labour of literature until six or seven in the morning. What kind of slumber could a man, leading such a life as this, be expected to enjoy? On the whole, it would appear that M. Jules Noriac's habits were diametrically opposed to the preservation of health and the prolongation of life, and that he died quite as much from too much Boulevard and too much night work, as from too much smoking. There are vast numbers of French journalists and men of letters who, without being necessarily "Bohemians," consume their health and shorten their lives by this continuous and feverish race against time. Their days are spent chiefly on the Boulevards or in the cafés, and it is only at the dead of night that they devote themselves to serious work. The French "savant," on the other hand, is rarely seen on the Boulevards. It is by day that he works, and he spends his evening in some tranquil "salon," and lives, as a rule, till eighty. The painter, again, must be a day worker, if he wishes to excel as a colourist. He is but a holiday "flaneur" on the Boulevards. They are but a part of his life; but of the "chroniqueur" and the "feuilletonniste" out of the small hours devoted to fagging at the production of "copy," those Boulevards are the whole existence.—*Daily Telegraph*, October 9, 1882.

tobacco cite Carlyle as a proof that tobacco does not shorten life. They credit him with saying that he could never think of this miraculous blessing without being overwhelmed by a tenderness for which he could find no adequate expression. No wonder, therefore, that he called his doctor a "Jackass," who advised him to give up smoking in order to cure dyspepsia. In Carlyle's case long life was a doubtful advantage, and in the matter of smoking he did not practice what he preached.† Many cases are known

† Describing the German Smoking Congress, he said :—Tobacco, introduced by the Swedish soldiers in the Thirty-years' War, say some, or even by the English soldiers in the Bohemian or Palatine beginnings of said war, say others, tobacco once shown them, was enthusiastically adopted by the German populations, long in want of such an article,

to us, however, where dyspepsia in smokers has been completely cured by the abandonment of smoking. The most recent case is that of Dr. Richardson, who was a dyspeptic during the whole time he was a smoker. "At length," he says, "I resolved to give up smoking. It was hard work to do so, but I eventually succeeded, and I have never been more thankful than for the day on which it was accomplished." In Carlyle's case a six months' abstinence could not drive out his enemy, which he declared was the cause of nine-tenths of his misery. A more successful illustration of the "harmlessness" of stimulants is supplied in Mr. Augustus Mongredien, well-known as an able expositor of the principles of Free Trade. He is now 75 years of age, and has smoked moderately all his life, and for the last fifty years has never, except in rare and short instances of illness, retired to bed without one tumbler of whiskey-toddy. But this is an excep-

and has done important multifarious functions in that country ever since. For truly in politics, morality, and all departments of their practical and speculative affairs we may trace its influences, good and bad, to this day. Influences generally bad; pacificatory but bad, engaging you in idle, cloudy dreams; still worse, promoting composure among the palpably chaotic and discomposed; soothing all things into lazy peace; that all things may be left to themselves very much, and to the laws of gravity and decomposition. Whereby German affairs are come to be greatly overgrown with funguses in our time, and give symptoms of dry and of wet rot wherever handled.—*History of Frederick the Great*, vol. 1, p. 387.

tional case of longevity. All the evidence favours the opinion that tobacco, like alcohol, shortens life. It *is* certain that abstinence is beneficial, as shown by the long lives of some of our hardest brain-workers. It is worthy of note, too, that all the tough old Frenchmen still in the enjoyment of unimpaired mental faculties never smoked. M. Dufaure, M. Barthélemy St. Hilaire, Victor Hugo, M. Etienne Arago, brother of the astronomer, Abbè Moigno, belong to the non-smoking school of public men. So did M. Thiers, M. Guizot, M. Crèmieux, M. Raspail, and the octogenarian, Comte Benoit-D'Azy, who died in full possession of his mental faculties.

Reference has been made to idiosyncrasy, a matter of great importance, which should be borne in mind when considering the influence of any habit on the organism, whether animal or human. Professor Christison cites a remarkable case in which a gentleman unaccustomed to the use of opium took nearly an ounce of laudanum without any effect. This form of idiosyncrasy is very rare. Not only are some constitutions able to bear large doses of poison, but others cannot take certain kinds of food. Milk, for instance, cannot be taken by one person ; pork by a second ; porridge by a third. In the use of the various

stimulants, as in the use of the various foods, the same difference prevails among men. "The more I see of life," says Sir Henry Thompson, "the more I see that we cannot lay down rigid dogmas for everybody;" and I have come to the same conclusion that it is unsafe to make one man's experience another man's guide. Kant could work eight hours a day after drinking a cup of tea and smoking a pipe of tobacco. Professor Mayor finds that a day or two's fasting does him no harm, and he thrives on "dry bread and water." Professor Boyd Dawkins finds quinine the best stimulant; Darwin found a stimulant in snuff; Edison finds one in chewing; Professor Haeckel finds coffee the best, and Mr. Francillon and Mark Twain bear testimony to the value of smoking. These differences point to the conclusion that the same rules cannot be laid down for all. One thing is clear, however, that our best writers, clearest thinkers, and greatest scholars do not regard the use of alcohol as essential to thinking, and very few find tobacco an aid. With one or two exceptions, the writers take care to minimise the dangers incurred in the use of stimulants. Though they smoke, they smoke the weakest tobacco; though they drink, they drink only at meals. They work in the day time, take plenty of out-door

exercise, and rest when they are tired. Many regard tobacco as a snare and a delusion; and all regard it as unnecessary for the brain of the youthful student. The greatest workers and thinkers of the middle ages, Dr. Russell remarks, never used it; * and Mr. Watts thinks that its introduction by civilised races has been an unmixed evil. It is a remarkable fact that out of 20 men of science, only two smoke, one of whom, Professor Huxley, did not commence until he was forty years of age. Even among those who smoke there is a considerable difference in the times chosen for smoking. Though the Rev. A. Plummer declares himself a firm believer in the use of tobacco, he smokes *before* work, *after* work, rarely while

* Homer sang his deathless song, Raphael painted his glorious Madonnas, Luther preached, Guttenberg printed, Columbus discovered a New World before tobacco was heard of. No rations of tobacco were served out to the heroes of Thermopylæ, no cigar strung up the nerves of Socrates. Empires rose and fell, men lived and loved and died during long ages, without tobacco. History was for the most part written before its appearance. "It is the solace, the aider, the familiar spirit of the thinker," cries the apologist; yet Plato the Divine thought without its aid, Augustine described the glories of God's city, Danté sang his majestic melancholy song, Savonarola reasoned and died, Alfred ruled well and wisely without it. Tyrtæus sang his patriotic song, Roger Bacon dived deep into Nature's secrets, the wise Stagirite sounded the depths of human wisdom, equally unaided by it. Harmodius and Aristogeiton twined the myrtle round their swords, and slew the tyrant of their fatherland, without its inspiration. In a word, kings ruled, poets sung, artists painted, patriots bled, martyrs suffered, thinkers reasoned, before it was known or dreamed of.—*Quarterly Journal of Science*, 1873.

at work. Mr. Wilkie Collins smokes after work, and Mr. James Payn smokes all the time he is working. Mr. Francillon's consumption of tobacco, and his power of work, are in almost exact proportion. Similar testimony comes from Mark Twain. Assuming that the prince of American humorists is not joking, his experience of cigar-smoking is unique. When Charles Lamb was asked how he had acquired the art of smoking, he answered, "By toiling after it as some men toil after virtue." I hope that young smokers will not conclude that by following the example of Mark Twain, their brain will become as fertile as his. To them tobacco is bad in any form. It poisons their blood, stunts their growth, weakens the mind, and makes them lazy. "It is not easy," says Mr. Ruskin, "to estimate the demoralizing effect of the cigar on the youth of Europe in enabling them to pass their time happily in idleness." It has been forbidden at Annapolis, the Naval School, and at West Point, the Military Academy of the United States, having been found injurious to the health, discipline, and power of study of the students. "At Harvard College," says Dr. Dio Lewis, "no young man addicted to the use of tobacco has graduated at the head of his class;" and at the lycées of Douai, Saint Quentin, and Chambéry

it has been found that the smokers are inferior to non-smokers. No public enquiry has yet been made as to the influence of tobacco upon English youths, but I am assured by several leading schoolmasters that the smokers are invariably the worst scholars. It cannot be too widely known, therefore, that tobacco, like alcohol, is of no advantage to a healthy student, and I advise young men to avoid it altogether. Darwin regretted that he had acquired the habit of snuff taking, and Mr. Sala says that had he his life to live over again, he would never touch tobacco in any shape or form. Never begun, never needed. "I do not advise you, young man," says Oliver Wendell Holmes, "to consecrate the flower of your life to painting the bowl of a pipe, for, let me assure you, the stain of a reverie-breeding narcotic may strike deeper than you think. I have seen the green leaf of early promise grown brown before its time under such nicotian regimen, and thought the amber'd meerschaum was dearly bought at the cost of a brain enfeebled and a will enslaved."

My conclusions, then, are as follows:—

1.—Alcohol and tobacco are of no value to a *healthy* student.

2.—That the most vigorous thinkers and hardest workers abstain from both stimulants.

3.—That those who have tried both moderation and total abstinence find the latter the more healthful practice.

4.—That almost every brain-worker would be the better for abstinence.

5.—That the most abstruse calculations may be made, and the most laborious mental work performed, without artificial stimulus.

6.—That all work done under the influence of *alcohol* is unhealthy work.

7.—That the only pure brain stimulants are *external* ones—fresh air, cold water; walking, riding, and other out-door exercises.

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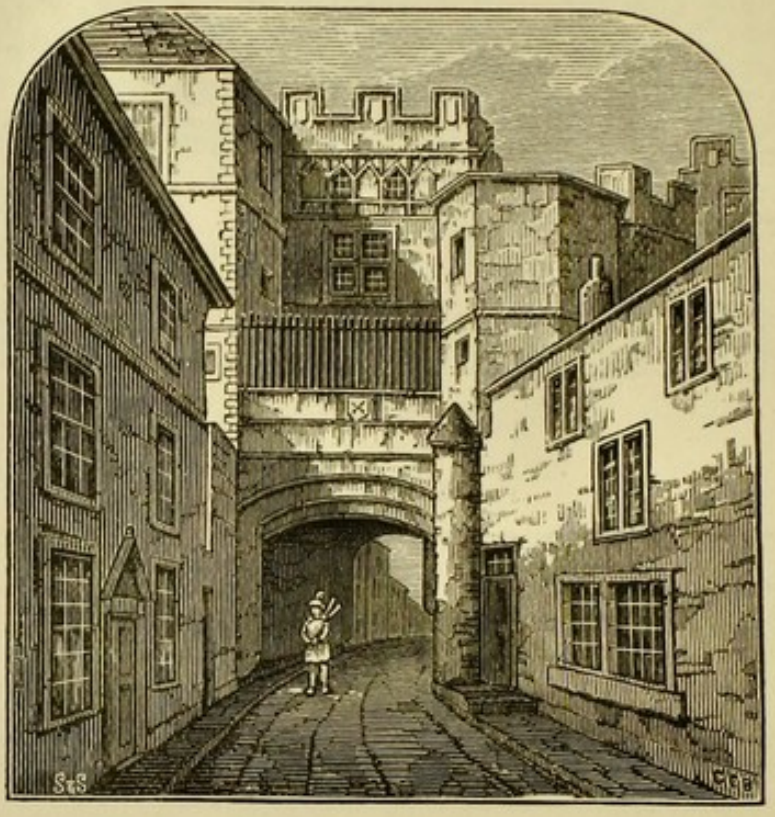

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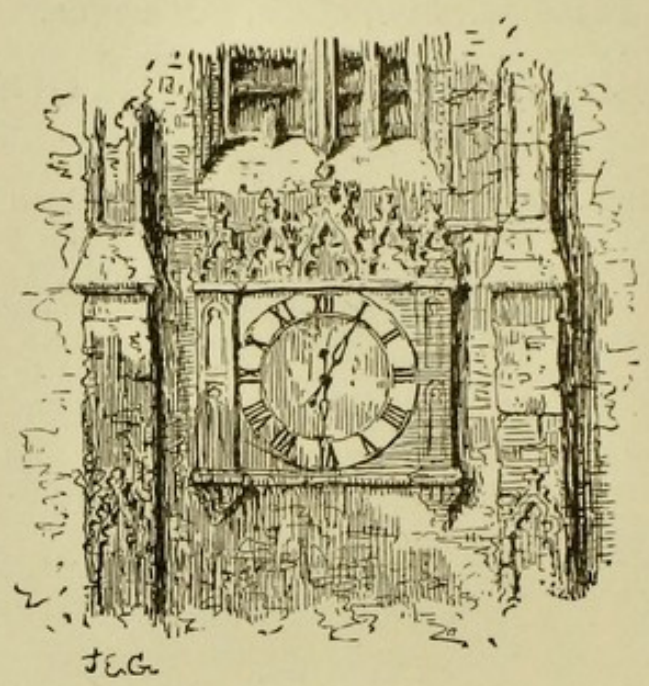

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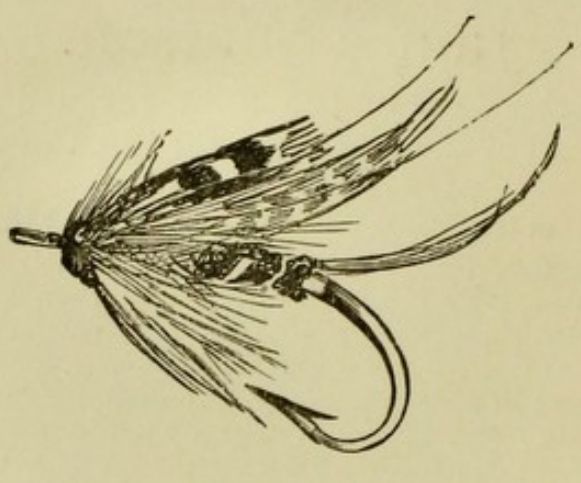

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