

in nature by the Mirage of the Desert is produced.

The strata of air vary in temperature, the layer nearest the sand is hotter than the air above it; the rays from any distant object, such as a house, a tree, a lake, strike at a very oblique angle and then undergo nearly total reflection as explained with the glass when placed at an angle of 89 degrees.

The illusion called the Ghost is, therefore, a spectral image produced by placing any illuminated object before a large sheet of plate-glass. The illuminated object is concealed from the view of the spectator, and is made to appear or vanish by alternately throwing on and cutting off the light used to illuminate the figure. The idea of the ghost was first shown by a toy model in which it appeared to be necessary to build a room specially for the exhibition. The writer by arranging lights before and behind the glass, and combining the action of the living figure with the spectral one, produced those startling effects which put thousands of pounds into the pockets of the Directors of the Polytechnic Joint Stock Company. Out of £12,000 sterling realized during the first year it was exhibited, the writer received the net too liberal and encouraging sum of £200 over and above his salary and percentage, and having to pay all the law expenses arising from the defence of the Ghost Patent, was, like nearly every inventor, the worst remunerated person in the affair. An attempt to vote him £1,000 at a General Meeting, was squelched by an informality in registering the proxies for votes.

The Ghost was produced under the writer's direction at the various London Theatres, viz., at Drury Lane, the Adelphi, and Britannia Theatres; also, in Paris, at the Théâtre du Châtelet, likewise at the Crystal Palace, Sydenham, and a number of other provincial Theatres and Lecture Halls.

It found its way without the permission of the Patentee to Germany, Spain, India, Russia, the United States of America, and must have realized for the various fortunate exhibitors a sum of at least a quarter of a million sterling—the largest sum ever realized by any optical illusion.

When the very learned Lord Chancellor, Lord Westbury, gave judgment for the Patentee in Chancery, he said, that in his boyish days he was taken by his father to see the celebrated Egyptian Traveller Holzoni, and the latter exhibited a toy which displayed the same kind of effect as the Ghost apparatus. The Lord Chancellor, in alluding to the evidence and affidavits, with drawings deposited in Court, said that the drawings were direct copies of the Patentee's, and were obtained in some improper manner. In speaking of one person who swore he had seen the ghost at some tea gardens in the neighborhood of Margate, England, his Lordship remarked "that the witness was spoken of as a 'nigger minstrel'; he was elsewhere denominated an 'Ethiopian Surrenderer.' He was no doubt a most respectable person, a very honest individual, but to put the evidence of such a person against that of Faraday, Wheatstone and Brewster, was a manifest absurdity, he therefore ruled that the Defendant's Patent be sealed and the Plaintiff pay the costs."

The writer cannot conclude this little sketch without speaking most approvingly of Mr. Bell Smith's admirable drawing of the appearance of the Ghost to the astonished student, which accompanies the description.—*Canadian Illustrated News*.

HABITS OF LITERARY LABOR.

BY DR. J. G. HOLLAND.

When Mr. Pickwick informed Mr. Jingle that his friend Mr. Snodgrass had a strong poetic turn, Mr. Jingle responded:

"So have I—Epic poem—ten thousand lines—revolution of July—composed it on the spot—Mars by day, Apollo by night—sang the flood-piece—travelling the lyre—fired a musket—died with an idea—rushed into wine-shop—wrote it down—back again—whiz, bang—another idea—wine-shop again—pen and ink—back again—out and slash—noble time, sir."

There are other people beside Mr. Pickwick who accept this method of literary production as quite natural and legitimate. We remember seeing, some years ago, a sketch by an extravagant humorist of a man, who wrote a book in a single night, tossing each sheet as it was finished over his left shoulder, pursuing his work with a pen that blazed with the heat of the terrible friction, and flinging away into the arms of anxious friends when the task was finished. Proprietors as the fiction was, it hardly exaggerated an idea prevalent in many minds that literary production is a sort of miraculous birth, that is as strenuous and inevitable as the travail which brings a new being into life. Indeed, there are some, perhaps many, writers who practically entertain the same notion. They depend upon moods, and if the moods do not come nothing comes. They go to their work without a will, and impotently wait for some angel to stir the pool, and if the angel fails to appear that settles the question for them. Such men of course accomplish but little. Few of them ever do more than show what possibilities of achievement are within them. They disappoint themselves, disappoint their friends, and disappoint a waiting public that soon ceases to wait, and soon transfers its expectations to others. Literary life has very few satisfactions for them, and often ends in a resort to stimu-

lating drinks or drugs in order to produce artificially the mood which will not come of itself.

There is a good deal of curiosity among literary men in regard to the habits of each other. Men who find their work hard, their health poor, and their production slow, are always curious concerning the habits of those who accomplish a great deal with apparent ease. Some men do all their writing in the morning. Some of them even rise before their households, and do half their day's work before breakfast. Others do not feel like going to work until after breakfast and after exercise in the open air. Some fancy that they can only work in the evening, and some of these must wait for their best hours until all but themselves are asleep. Some cannot use their brains at all immediately after exercise. Some smoke while writing, some write on the stimulus of coffee, and some on that of alcohol. Irregularity and strange whims are supposed to be characteristic of genius. Indeed, it rather tells against the reputation of a man to be methodical in his habits of literary labor. Men of this stripe are supposed to be mechanical phylidiers, without wings, and without the necessity of an atmosphere in which to spread them.

We know of no better guide in the establishment of habits of literary labor than common sense. After a good night's sleep and a refreshing breakfast, a man ought to be in his best condition for work, and he is. All literary men who accomplish much in a lifetime find their health do their work in the morning, and do it every morning. It is the daily task, performed morning after morning, throughout the year—carefully, conscientiously, persistently—that tells in great results. But in order to perform this task in this way, there must be regular habits of sleep, with which nothing shall be permitted to interfere. The man who eats late suppers, attends parties and clubs, or dines out every night, cannot work in the morning. Such a man has, in fact, no time to work in the whole round of the hours. Late and irregular habits at night are fatal to literary production as a rule. The exceptional cases are those which have fatal results upon life in a few years.

One thing is certain: no great thing can be done in literary production without habit of some sort; and we believe that all writers who maintain their health work in the morning. The night-work on our daily papers is killing work, and ought to be followed only a few years by any man. A man whose work is that of literary production ought always to go to his labor with a willing mind, and he can only do this by being accustomed to take it up at regular hours. We called upon a preacher the other day—one of the most eloquent and able men in the American pulpit. He was in his study, which was out of his house; and his wife simply had to say that there was no way by which she could get at him, even if she should wish to see him herself. He was wise. He had his regular hours of labor, which his person was permitted to interrupt. In the afternoon he could be seen; in the morning, never. A rule like this is absolutely necessary to every man who wishes to accomplish much. It is astonishing how much a man may accomplish with the habit of doing his work at during three or four hours in the morning. He can do this every day, have his afternoons and evenings to himself, maintain the highest health, and live a life of generous length.

The reason why some men never feel like work in the morning is, either that they have formed other habits, or that they have spent the evening improperly. They have only to go to their work every morning, and do the best they can for a dozen mornings in succession, to find that the disposition and power to work will come. It will cost a severe effort of the will, but it will pay. Then the satisfaction of the task performed will sweeten all the other hours. There is no darker or deadlier shadow than that cast upon a man by a deferred and waiting task. It haunts him, chases him, harries him, sprinkles bitterness in his every cup, plants thorns in his pillow, and renders him every hour more unfit for its performance. The difference between driving literary work and being driven by it is the difference between heaven and hell. It is the difference between working with the will and working against it. It is the difference between being a master and being a slave.

Good habit is a relief, too, from all temptation to the use of stimulants. By it a man's brain may become just as reliable a producer as his hand, and the cheerfulness and healthfulness which it will bring to the mind will show themselves in all the issues of the mind. The writings of those contemporaneous geniuses, Scott and Byron, illustrate this point sufficiently. One is all robust health, the result of sound habits; the other all fever and irregularity. What could Poe not have done with Mr. Longfellow's habit? No; there is but one best way in which to do literary work, and that is the way in which any other work is done—after the period devoted to rest, and with the regularity of the sun.—*Scribner's for February*.

CHRONIC ALCOHOLISM.

We are quite ready to admit that decorum is in itself a good thing. The familiar spectacle of gentlemen speechless and staggering from the effects of heavy potations could not fail to have a degrading and brutalizing effect upon the society to which they belonged. It is morally an advance that men should be ashamed of being seen in this odious and filthy condi-

tion. But decorum may be in itself a snare, and it is well that the truth, however coarse, vulgar, and unpleasant it may be, should be faced. It must be remembered that the three-bottle and four-bottle men of other days were after all exceptional men, and a mere handful in the community, and that, although most men then thought little of getting drunk, this was with a great many an indulgence which they allowed themselves not habitually, but only on special occasions and with intervals between. The main difference between the drinking habits of the last generation and of the present would seem to be, that formerly men, when they sat down to drink, drank more at a time, while now men drink moderately at a sitting, but in sips or "nips" drink a good deal during each day. Whether the modern habit is better than the old habit is a question which possesses only a speculative interest. The important thing is, that the modern habit should be recognized as vicious and unwholesome. We are aware that this is quite an old story now, and perhaps people may be tired of its repetition. Unfortunately the necessity for speaking of it does not appear to have diminished. About a year ago the doctors published a declaration respecting alcohol, insisting that, as a medicine, it ought to be prescribed with the same care and precision as any other powerful drug, and pointing out that its value as an article of diet was immensely overrated. The document also recommended legislation with a view to confine the use of alcohol within proper limits, and to promote habits of temperance. For our own part, we should be disposed to rely much more confidently on the personal influence of the doctors themselves than on any kind of legislation. Something may be done by legislation to enforce order and decorum in the streets and in places of common resort, and to curtail the facilities for public drinking, but after all this is only making clean the outside of the platter. Most reasonable persons will admit that the Licensing Act goes about as far in this direction as is practicable, if indeed it does not rather overshoot the mark. It is just because we are convinced of the powerlessness of legislation, because we distrust all violent coercive measures, and have no faith in any reform that does not spring from voluntary restraints and an improved state of public opinion, that we feel bound once more, at the risk of wearisome iteration, to call attention to the subject. The Excise returns, the statistics of criminal offences, the warnings of the doctors, the feverishness and excitement of social life, the prevalence of nervous disorders, the crowded drinking bars, and the marked increase of the number of reeling drunkards in the streets, all point to the same conclusion. It is impossible to doubt the growing intemperance of the working classes. Personal observation on such a point may sometimes be misleading, but the same story comes from all parts of the country. As a rule, high wages seem to mean only more drinking; and drinking means wife-beating at home and fighting in the streets. Mr. Vernon Harcourt, who objects to the stringency of the Licensing Act, appears to think it necessary to argue that the country is really very temperate and sober. We have as little liking for restrictive legislation as Mr. Harcourt, but we see no use in shutting our eyes to unpleasant facts. It is necessary to distinguish between the bigotry and fanaticism of the teetotalers and the basis of truth which underlies their agitation. The evil which they denounce unhappily exists, and even their violent and distempered imaginations can hardly exaggerate its magnitude. It may be reasonable to resist the tyrannical measures which the total abstinence are anxious to impose upon the country, but it is idle to pretend that the country is in this respect in a satisfactory condition. It is scarcely a consolation to be told that the vast increase in the expenditure on intoxicating liquors is a proof of the prosperity of the nation. It is doubtful whether the present high rates of wages will be maintained; but, if they fall, the passion for stimulants which has already been developed will unfortunately remain. Anybody who reads the police reports will see the steady increase of cases of brutal assaults, especially on women, which may be traced to drinking. The present "genial" season has been appropriately celebrated—a woman supping with her husband and friend suddenly flung out of window; a man stabbed by his wife, a wife by her husband, a girl by her sweetheart. "Thank God Christmas is over!" we heard a poor woman say the other day as she strolled her staggering husband up the steps of a railway station.

We are quite of one mind with the Bishop of Peterborough that, if it is necessary to choose, freedom is better than sobriety; but it is not impossible for people to be free and sober too. The criminal statistics compiled by the police show an increase of more than forty per cent. in the convictions for drunkenness before the magistrates in England and Wales in 1871 as compared with the average of the previous ten years. The Excise and Customs returns show a vast increase in the consumption of all kinds of drink, and especially of spirits. The country has been thriving, wages have been high, and the surplus earnings have been spent chiefly in liquor. These are not pleasant facts, and they hardly confirm those pretty theories of social progress of which we hear so much. But progress has been said to be like a wave which sometimes seems to retire even in the course of advancing, and this may perhaps be only one of the backward movements of social improvement. As far as we can see, there is nothing to be done in the matter except to direct attention to the facts, and leave them to make their

impression on the public mind. It is reserved nowadays for the writing-man to get drunk in the old way, "like a lord," but the other classes, though they bear themselves more discreetly, suffer for their potations in other ways. Brandy and soda, bitter ale, odd glasses of sherry, nips, and pogs, and drama, keep up a perpetual irritation and excitement which, added to the cares and worries of business and the fatigues of social life, wear out the nerves, and are apt to end in hysteria or paralysis. The doctors, who are aware of the spreading evil, might do much to check it, and their duty in the matter was certainly not exhausted by the signing of the declaration of a year ago. The lesson needs to be constantly and emphatically enforced. The evil should be probed to its root in neglect of sanitary and dietetic rules, and the forced pace of social and especially of business life. The attempt to get through ten hours work in five or six explains in a great measure the craving for stimulants. People, though they have more holidays than they used to have, get less rest, and rest is what they want.—*Saturday Review*.

GHOSTS.

We have changed much in these days from the old times when ghosts were almost an article of faith, and when the person who told a tale of the world of spirits might chance to gain credence for his narrative without an inner reservation "that, at all events, it is very difficult to account for it." In Queen Elizabeth's time that stage direction in "Hamlet," "Enter Ghost," struck a real chord of emotion amongst the people, and, so far from weakening the force of the illusion, considerably heightened it by introducing a mysterious agency, as to which all were more or less sympathetic. Thus, in the Middle Ages a ghost had a dignity very different from the Pockham apparition of these days. There is a story told in French history of a peasant of Marseilles who was troubled by an unearthly visitor. The peasant was to make his way to the king, and reveal to him a message that would be communicated to him; but if he disclosed it to any one else he would die. He did disclose it to another—his wife—and he died, falling dead on the spot, too. The perturbed spirit, however, though unfortunate in this choice of a messenger, revenged himself a second time, with similar formalities and threats, and again the garrulous French nature could not keep reticent about the news. The tale was told, and the narrator, in his turn, died. Yet a third time the ghost spoke. This time to a farther. The tale we tell is historical, and the facts precise and ascertained. The farrier kept his counsel, journeyed to Versailles, saw Gold Stick in waiting, who was very polite, but very obtuse. A peasant from Marseilles have an interview with the Majesty of France! Impossible; a thing not to be heard of! Farrier brings forward his ghastly facts. Proof offered, asked for, given. Did not two other of the good folks of the town to whom revelation had been made die because they departed from the strict letter of their instruction? Gold Stick was alarmed. Could not the truth of these statements be easily ascertained from the local authorities? Gold Stick was relieved. The farrier was to call in a couple of days—he called, saw the king in private, had several interviews with him, and returned to his own province a wealthy man, supported by the revenue, a public character from that time till his death, and probably a bachelor and misogynist, for the substance of the secret never transpired. It is all historical. The best artist of the day drew our farrier, the drawing was engraved, and copies of it exist in several private collections. One writer professes to have seen the print, and says that "it represents the face of a man about thirty-five or forty years of age, with an open countenance, rather pensive, and with a very characteristic expression"—a somewhat vague description as to the whole, and one would be glad to have learned what was the special character of that expression.

We live in different days now, and the age of apparitions seems, notwithstanding an occasional exception, to have passed away. The ghost of the 19th century cannot keep his secret as well as his brother spirit of the 17th, and it is the magistrate, not the minister, with whom he is confronted. The lantern of "Pleasance X" shines upon the apparition, and under this manifestation the mystery not so much dissolves into thin air as solidifies into flesh and blood. The spirit then becomes what the Acts of Parliament call a "person," and the laws of the land take their useful and uninterrupted effect.

And yet who will deny that there lingers a strong belief, which none of the vaunted "enlightenment of the nineteenth century" can crush down, in ghosts and apparitions? What is spiritualism but a mode of the same disease? We are not as credulous as our simple forefathers, and we have a way of severing our judgment from our faith, and being mortally afraid of ghosts, though we well know that such things do not exist. What is the experience of each one? Is there any reader of this paper who, however fortunate in his own experiences, has not had some relative or friend, or acquaintance, who has seen a ghost? We do not mean sounds or rappings, but a real *bona fide*—we were going to say—*dash-and-blood* live ghost? The writer himself forms no exception to the rule which he believes prevails. Here is a story told to him by one of the chief actors:—Three students of a university, situated in what Thackeray calls a viceregal city, had retired after