



An Hour with the Editor



AN ERA OF CHANGE

In no line of human interest have the past hundred years brought about greater changes than in those things which relate to our daily comfort, and among these light occupies a prominent place. Many people can remember when candles were the only means of artificial illumination available to the very great majority, and know well the difference between "moulds" and "dips," and the relative economy of "sixes" and "eights." On the other hand the very greater number of people living in civilized countries today never saw a candle made and would not know what use to make of a pair of snuffers. It is probable that not a few of them hardly know what it means to snuff a candle, and could not do the trick with their naked fingers if their lives depended upon it. With the disappearance of candles from common household use a lot of interesting practices and amusing superstitions have vanished. About the middle of the last century efforts were made to supply a cheap and portable fluid that would be useful for illuminating purposes, and several varieties were placed on the market. There was Camphine, a preparation from turpentine, which was burned in glass lamps from which projected a small round wick. It gave rather more light than an ordinary tallow candle. Attached to the lamps there were extinguishers, with which the light was to be put out. Of this preparation there were several varieties, differing chiefly in the fact that some of them were less explosive than others; but they were all sufficiently dangerous, and every now and then one would hear of some one being killed by the dreadful stuff, which would not now be tolerated in any civilized community.

Illuminating gas was very slow in coming into general use, a fact that illustrates the non-progressiveness of our immediate predecessors. As long ago as 1739 an Irish clergyman gave a lecture on the distillation of gas from coal, but it was not until 1792 that this gas was used for illuminating purposes. In that year a man lighted his house in Cornwall with gas, and six years after he was able to persuade a firm of manufacturers in London to try it. But people hesitated to use the new illuminant. A man named Windsor took up the new invention and he proposed a scheme whereby through the use of gas the national debt was to be paid off, and vast wealth was to be produced. His extravagant claims led people to doubt the utility of the new invention, but in 1810 the chartered Gas Company of London was organized and from that time onward the use of gas steadily grew more general.

The use of petroleum and its various products for illuminating purposes dates from an early age. Being a natural product, its use very probably was not uncommon in prehistoric times. There are certain references in ancient literature which seem better explainable by supposing them to relate to petroleum than in any other way, and there is pretty conclusive evidence that it was burned in sacred lamps in Roman temples before the time of the Caesars. It seems to have been in use in China and Japan at a very early day, and in India and Persia also. The prehistoric inhabitants of America seem to have used it, but for what purposes is not known. In boring for salt in Europe and America petroleum was often encountered, but no one seems to have suggested any useful application of it. In the course of boring operations carried on in Kentucky in 1829 an oil well was developed, and the oil ran out on the surface of the Columbia river and became ignited. The flames covered the surface of the water for more than fifty miles. The only use which this suggested to the people was that the oil might be useful for medicinal purposes. As late as 1856 a considerable business was done in the sale of petroleum in small bottles for medicinal use. Attempts were made to employ it for illuminating purposes but its odor and the absence of any means whereby it could be kept from smoking proved for a time an insurmountable barrier. A process for refining the oil was invented in England in 1850, and was introduced into America two years later, when the product was called kerosene by the patentee. From that time onward petroleum became a more and more common illuminant. About 1860 a very interesting discovery was made in New Brunswick. A mineral was found, called Albertite, because it was found in Albert county. It resembles jet and in the mass is of a brilliant black. It breaks with what are called conoidal fractures; that is, they are shell-shaped and perfectly smooth. It occurs in pockets. It seemed to be little else than crystallized paraffin. It was used for the manufacture of what was by far the best illuminating oil known at that time. But the known pockets were soon exhausted, and the discovery of the oil-fields of Pennsylvania led to the market being so flooded with petroleum that prospecting for Albertite was abandoned. During the last twenty-five years the number of petroleum products and their uses have greatly multiplied, but this branch of the subject will be considered at another time.

In the year 1800 Sir Humphrey Davy discovered that if two carbon points, connected with the opposite poles of an electric current, were brought near each other the points would become intensely illuminated. Seven years later he gave a public exhibition of the first arc light; but no attempt was made at that time nor for a long while afterwards to put the discovery to any commercial use. The reason, doubtless, was that no cheap method of producing electrical energy in quantity

and cheaply was known. This was discovered about 1864, when the first dynamos were made. The arc light as a practical illuminant followed not long after. It was soon seen that this light would not be suitable for all purposes, and inventive genius set about to discover some other system. The final result was the invention, in 1878, of a platinum incandescent light, which worked very satisfactorily, but was not a commercial success. Edison, in 1869, gave us the carbon incandescent lamp in use today, but he was not the first person to use carbon as an incandescent, a man named Starr having employed it in the form of plates. Edison devised the carbon filament with which we are all familiar, and with this invention the electric light became an immediate and unparalleled commercial success.

Thus we see that while the progress towards better illumination began about the beginning of the last century, the great strides in it have been confined to the last fifty years, and as we all know the improvements made during the last twenty years have been immeasurable. Many persons, who remember when the best they could hope to have in the way of an artificial light was such as could be derived from a multiplicity of candles, which had to be attended with care and were never, under the most favorable circumstances, satisfactory, now live in houses brilliant with electricity. This article is being written under a Tungsten electric light, but the writer of it recalls with what wonder the neighbors came to his father's house to see what was one of the first gas lights installed in the town where he was born. He lived in the capital city of his province, but he remembers studying his school lessons by the light of home-made candles.

ENGLISH SOVEREIGNS

Henry VIII. looked upon the crown and kingdom as his personal property undertook to dispose of them by will and appointed executors to administer the affairs of the nation during the minority of his son Edward VI., who succeeded him. Edward was son of Jane Seymour. The executors were sixteen and in selecting them Henry had said that he had chosen eight because they were dull and eight because they were rash, which was his way of defining the difference between the Conservative and Progressive parties of that day. His idea was that by entrusting these sixteen men with equal powers they would offset each other and maintain the status quo until his son came of age. But the executors themselves saw that the plan would not work; the "rash" became the more influential, and electing the King's uncle, the Duke of Somerset, as regent, they called a Parliament and set to work protestantizing England. Archbishop Cranmer was made a sort of Minister of Public Worship, and he was ably seconded by Bishops Latimer and Ridley. The Catholics in high offices were promptly removed, a commission was sent around the kingdom to remove all evidences of Roman Catholicism, to see that the Bible was regularly read in the churches, that the Mass was not celebrated and that Sunday was observed and the Saints' days disregarded. All the bishops were required to take out patents from the Crown, and in short everything was done that ingenuity could suggest to show that the end of papal authority in the kingdom had been reached. Cranmer prepared a new liturgy; the altar was declared to be a communion table; the eucharist was no longer a sacrament but merely a commemoration; common prayer was ordained; prayers for the dead were abolished; religious services were ordered to be carried on in English; the use of crucifixes, images, chalices, holy water and other emblems associated with the Roman form of worship was forbidden; the clergy were shorn of every semblance of authority; and the marriage of priests was authorized.

In the towns and cities changes seem to have been welcomed, and generally throughout the eastern counties. In the western counties they were not well received and there were popular uprisings against them, but they were easily suppressed. England had certainly been made Protestant as far as the law could make it so. But the movement, which is called the Reformation, was not confined to ecclesiastical matters only. The whole social condition of the people was changing. For the first time in the history of England competition in trade and industry became general. The old guilds had become very tyrannical. They insisted upon long apprenticeships, and upon limiting the number of apprentices, if the baronage was tyrannical in its way, the guilds were equally so in theirs, and between the two the condition of the people became well-nigh desperate. Sir Thomas More in his Utopia wrote: "When I consider and weigh in my mind all these commonwealths which nowadays do flourish anywhere, so God help me, I can perceive nothing but a certain conspiracy of rich men procuring their own commodities under the name and title of the commonwealth. They invent and devise all means and crafts, first how to keep safely, without fear of losing, that they have unjustly gathered together, and next how to hire and abuse the work and labor of the poor for as little money as may be. These devices whom the rich men have decreed to be kept and observed under the color of the commonality, that is to say also of the poor people, then they be made laws." These words of More do not relate to the aristocracy but to the rich guilds. The kingdom was rapidly being divided into three classes, the baronage, the trades guilds

and the peasants, the common laborers being included among the latter. Out of this condition grew pauperism, which must not be confounded with poverty. Every poor man is not a pauper, for the latter term implies the receipt of aid of a more or less public nature, a right to such aid being regarded as a settled thing. Pauperism followed the breaking up of the feudal system. Five centuries ago what was called villenage was still the rule in England, and men were attached to estates. They were not slaves, for they had recognized legal rights and one of them was of remaining on the estates to which they were attached. A villein could not be sold by his lord to another proprietor, or be sent away without his consent. Lordship over him passed with the sale of the estate to a new purchaser. If he was compelled to serve his lord, he was also entitled to be supported by him, and as a general thing the obligations on both sides seem to have been faithfully carried out. We saw greatly disturbed this orderly state of things. Workingmen being fewer in number, they became more independent and villeins left their estates in great numbers. An effort was made by legislation to prevent the dislocation of society, but it succeeded only indifferently, and during the reigns of the Tudors England was socially and industrially in rather an unfortunate way. Great evil was caused by the amalgamation of small estates into sheep farms, whereby not only was the supply of ordinary food lessened, but thousands of people were thrown out of employment. The feudal lords rarely farmed their own lands. They were too much occupied with other matters. Therefore they divided their estates into manors, and to the lords of the manors were delegated control over the villeins. It is said that at one time all England was divided into manors. When in consequence of the Hundred Years' War and the Wars of the Roses the baronage was greatly reduced in numbers, the manorial tenure of land became the general rule and out of this arose the class of landed gentry, which is so prominent a feature of the English social system. Scarcely any of the modern English peers can trace descent as far back as the reign of the Tudors, and the very great number of the holders of titles belong to families ennobled within a century and a half; but hundreds of the landed gentry can trace descent and the tenure of their estates for hundreds of years. Hence it is often said that this class constitutes the real aristocracy of England.

From an essay written by Rev. Augustus Jessop about half a century ago the following description of life in rural England at that time or perhaps a little earlier has been summarized. Possibly things had improved a little by the reign of Edward VI., but there is not much reason to suppose that any change had been made for the better. Mr. Jessop tells us that the manor houses were squalid enough, but that the houses of the poor were "dirty hovels, run-up any how." They had neither chimneys nor windows. A fire was built in the middle and the smoke went up through a hole in the roof. The laborers, his wife and children huddled round it, sometimes grovelling in the ashes. The only light was the smouldering fire. "For a bed there was a little heap of straw. The food was a fish coarsest, the poor man's loaf being 'as dark as mud and as tough as the leather of his shoes.' Salt was very scarce, the only means of procuring it being by evaporating sea water, and consequently it was difficult to preserve meats. Sugar was unknown to the very rich, and bees were greatly cherished as the only means by which anything sweet could be provided. The drink of the people was chiefly water, although cider was not uncommon and nearly everyone brewed more or less beer. The common people had very little vegetable food, and what they had consisted chiefly of cabbages. For clothes they wore a single garment tied around the waist by a rope. The lords of the manors fared very much better as a matter of course, but even they had only what we would call scant comforts. Only the very rich had glass in their houses six hundred years ago, a piece of oiled linen serving to keep out the rain and wind while admitting a little light. In the towns things were much better, but the manner of living even there was very much more simple than it is today. There were fewer artificial needs and on the whole the urban population seems to have been fairly comfortable. We are told that during the reign of Edward VI. the study of Greek became very common at Oxford, and that the students flocked there, living in many cases on the very verge of starvation that they might pursue their labors. Money was scarce, and Henry VII. debased the currency, so that its actual purchasing power became greatly reduced. But a new spirit began to make itself felt at the beginning of the Sixteenth Century and an impetus was given to progress which has continued until today.

ALL ROUND DEVELOPMENT

We now seed in the spring with confidence that we will reap a harvest. Sometimes we are disappointed. The frost kills the young plants, or the drouth causes them to wither. But this does not cause us to abandon the sowing of seed. We do not know why seed germinates, why plants grow or why they yield their increase. It is all a deep mystery; but that does not influence us. We have faith on the processes of the vegetable world and order our lives accordingly. So also in other departments of the physical creation. We

trust the results of our observation, and acting upon them have learned more and more about physical processes and how to turn them to our advantage. In the first efforts of men to analyse and act upon the forces of nature they probably made a good many errors. When the locomotive engine was first proposed, doubt was expressed if an engine could haul a load, and one inventor made an ingenious arrangement of jointed rods that was to push the cars along the track. In nearly every department of physical science and practical application of physical forces, men have had to creep before they could walk.

In the mental field we trust to our reasoning faculties. Experience shows that we cannot always be certain as to their operation, and that we all have to learn to employ them to the best advantage. The operations of the intellect are absolutely mysterious. Take money for example. We trust it although we do not pretend to understand it. We know that its powers can be enlarged. We know it is fallible; yet we trust it to such an extent that we might almost say our whole lives are dependent upon it.

There is a third field of action, which some call the psychic, some the occult, others the spiritual. Like the other domains it is full of mystery; but curiously enough this is regarded as a reason for denying its existence. If we accept the operation of physical and mental forces, notwithstanding their mysterious nature, why should we hold that its mysterious nature is an argument against spiritual forces? It is objected that the operations of the latter are often uncertain; but so are the operations of the others. When it is said of a person that he can accomplish certain things through faith, we object to the statement because we cannot accomplish the same things in the same way. We do not refuse to believe that a man can swim because we cannot, or that another can make elaborate mental calculations because we cannot. We admit a diversity of powers in the employment of physical and mental powers; we refuse to admit that there may be a diversity of powers for the employment of spiritual forces.

In the employment of physical forces we are careful to see that the conditions are those under which such forces will operate, and the same is true of our employment of mental forces. Sometimes we ask what a man has had for dinner before we are satisfied to accept his judgment. But when it comes to the exercise of spiritual forces we demand that they shall be operative under any conditions that we may prescribe, and because they are not, we refuse to believe in the existence of such forces.

We admit that efficiency in the use of physical and mental forces come from study and practice. We demand that the efficient use of spiritual forces shall be possible without study or practice, and because it is not, we decline to believe in the existence of such forces.

Certain persons after scuffling their feet over a carpet can ignite the gas by snapping their fingers over the burner. Most people cannot do this, and those who can cannot always do it. Everybody believes this. Certain people aver that by the exercise of what they call faith they can heal diseases. Most people cannot do this, and those who can cannot always do it. Everybody does not believe this. They do not believe it for various reasons. One is that they cannot do it themselves, or say they cannot, for they do not know whether they can or not because they have never tried. Or perhaps if they have tried, they have not complied with the conditions by which success might be expected to be assured. Perhaps they have declined to make the effort because it involved belief in a something that is mysterious and cannot be explained.

That is all that seems necessary to be said; but it is worth thinking over. We add except that until we have made the most of the spiritual side of our natures we have not been fully developed.

A Century of Fiction

XXXII.
(N. de Bertrand Lagren)

James Barrie and S. R. Crockett

A great many of us have a distinct aversion to books in which the authors employ the dialect of the country of which they write, and perhaps it is one of the surest proofs of Mr. Barrie's power to interest that in his case the use of the Scotch dialect not only fails to antagonize, but adds to the charm of the story for us. To be sure the author's use of it is not excessive, and we have no difficulty in understanding the sometimes untranslatable meaning, and Mr. Barrie is an artist and gives us always what is most poetical. Not only is he an artist in a literary sense but he is an artist in the refinement of all his sensibilities. He charms us by all of his descriptions whether of places, people or things. Where a man of lesser refinement might find only those qualities which tend to repulse and shock, Mr. Barrie with the faith of a beautiful philosophy delves deeper and invariably finds some hint of loveliness or loveliness, so that all of his characters seem to possess a remnant of virtue, and the good ones extend a helping hand to us, while at the worst the bad ones only demand our pity. Just what place this delightful author holds in the rank of modern novelists, must remain for the present an individual

question. But we all agree to his literary merit, his never-failing sense of humor and his broad and generous understanding and sympathy. Some of his admirers can be excused for thinking him to be without a peer among present day writers, certainly he takes one of the first places in the class of Scotch novelists and dramatists.

Kirremuir, the "Thrums," which he has made so famous, was his birth place in 1860, of his father and mother he has also given pen pictures to the world in Dr. McQueen and "Jess." He went to school, first at Dumfries where he took an academy course, graduating at eighteen to attend the University of Edinburgh. Here he took his degree of M. A., and also honors in the English literature class.

His first work was journalistic, he worked for a few years on a paper in Nottingham, England. But he met with success almost at once when he began to contribute to magazines, and encouraged, he went to London where the editor of the St. James Gazette, recognizing his talent immediately became his friend and publisher. Perhaps it was due to this editor, Frederick Greenwood, that Barrie happily found his natural field at once. The young author objected at first to confining himself to stories and sketches wholly Scottish, but his friend perceived that in this vein alone lay his real genius and he refused to accept contributions that did not possess the characteristics desired.

His first story "When a Man's Single" is in a sense autobiographic. It was not highly meritorious but possessed the promise of better things to come. "A Window in Thrums," written two years later, brought him into prominence, and in 1891 "The Little Minister" made him famous. Since then he has produced several plays and three or four more novels, each successive work adding ore to his large circle of admirers.

The Little Minister

This wholly charming story has as its hero a young boy preacher, Gavin Dishart, who is a delightful mixture of contradictions of character, and so wholly human as to win our sympathy from the outset. His congregation admire him intensely and at the same time keep a vigilant eye upon all of his doings. Consequently when the beautiful little Egyptian "Babbie" comes across his path, to steal his eyes from his books, his mind from the thoughts of his people; the elders and the others in authority attempt to adjust matters, and with the usual consequences. The plans are all frustrated by a series of events in which nature herself takes a hand and after much sorrow and severe trials, the lovers are married and forgiven. Young Gavin's mother is only one among the many.

S. R. Crockett

A native of Galloway, Scotland, Mr. Crockett has allowed his environments to color with picturesqueness and infinite variety and many novels. He is a typical Scotchman, nothing so sacred to his heart as the faith of his fathers, and the brave traditions of his country. He is not as poetical as Barrie and he has not an infinite amount of the latter's sweet philosophy; but he is an earnest, careful writer, with just the necessary amount of sentimentality to make his love stories natural.

He was born in 1862 in Little Duchrae, and like most Scotch lads whose fathers were tenant farmers, was taught to do his daily task while he was little more than a baby. Hard work was his portion all through his early years, and he accepted his duties uncomplainingly. We read of him at the age of five or six trudging over the three miles to the parish school, braving all sorts of wind and weather with the stoicism of a little Trojan. He finally left his school with honors at the age of fifteen.

His parents being unable to shoulder the responsibility of sending him to college, Crockett undertook to work his way through, attending Edinburgh University, and tutoring or doing journalistic work during spare hours. His own and his parent's highest ambition was to see him an ordained clergyman. His university training was very severe and in 1884 he graduated a minister of the Free Church of Scotland.

The Stickit Minister

This is a collection of short stories, the first of which gives the book its name. The stickit minister was a young divinity student, who learns early in his career that he must die of consumption, and determines to give up his studies and return home and work the farm as long as he can, and give his younger brothers the benefits that were to have been his. He keeps his unhappy secret to himself so that there may be no question of their accepting his sacrifice, but he suffers much ignominy as the villagers conclude that he has failed in his studies and has been forced on this account to give up. It is a pathetic little tale, but very quaintly and sweetly told.

Cockney—"The fox went down there quarter of an hour ago." Huntsman—"Why didn't ye holler, then?" Cockney—"What did I want to 'oller for? 'Ee never bit me."

All Complete

An advertiser is willing to sell four dozen of port and an invalid chair. We consider this an exceedingly happy combination.—Toronto News.