

THE EARLY HISTORY OF COLT

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The war of 1914/1918 had ended three years previously when, in 1921, I decided that my future should be in some form of commercial or industrial activity. I was living at home with my parents, who had always been a source of enormous strength and support to me. My business knowledge and experience was nil, and I decided that probably the quickest way of acquiring some knowledge was to sit for examinations of the Chartered Institute of Secretaries, as their syllabus covered not only Company Secretarial work, but Company law, Commercial law and Accountancy. I signed on for a Correspondence course for the intermediate and final examinations of the Institute, a course which normally took three years. Every morning I used to play golf with my father at Wimbledon Park Golf Club, and every afternoon and evening I worked hard at the Correspondence Course. I passed the intermediate examination in six months and the final a year later.

I still had had no practical business experience, and so I thought that the best thing to do would be to work for a time with a firm of Chartered Accountants. I was introduced to Mr. R.G. Pye, of E.S. Howard, Pye & Company, and worked with them first as a junior, then as an audit clerk for a period. This was a most valuable experience; and I would strongly recommend any young fellow entering commercial life to work for at least a couple of years in a Chartered Accountant's office. It gives one a remarkable insight into the heart of businesses and the opportunity to acquire the extremely valuable ability to read a Balance Sheet.

In 1924 through my brother, Leo, I was introduced to Charles Diamond and became his Personal Assistant. Diamond was a power in Fleet Street - a quite amazing fellow. Within the first week I realised that I would not be there very long. I accepted the job partly because Diamond was about to make a large public issue of shares in Yorkshire Paper Mills Limited, and I was to have the opportunity of being involved in this interesting part of secretarial work. I remember spending three days and pretty well three nights at the Head Office of Lloyds Bank in the City, dealing with the mass of paperwork involved in the issue. Subsequently, Diamond offered me a position in the Company, which would involve moving to Bradford in Yorkshire. I neither wanted to move to Bradford, nor remain in that type of business, and I parted company with Diamond.

I suppose it was round about this period that I firmly and finally got into my head the idea that I wanted to be my own boss in business and paddle my own canoe.

I had a very small capital, consisting of £500 given to me by my father and £1,500 lent to me by an old friend of the family. I then spent some months hunting round for a business in which I could invest my capital and energies. I was attracted by a small 2-man business which had been started at West Drayton, Middlesex, in a ramshackle factory by a young rubber chemist and an ex-Air Force officer. The accounts for their first two years looked reasonably promising, with a hopeful future potential. We entered into an agreement under which I undertook to work for them for nothing for nine months, with the option thereafter of investing in the business.

The business consisted of buying up old disused cinematograph film from the Production Companies, stripping the emulsion off it and converting the base into celluloid pulp which, in turn, was extruded into tube. There was a ready market for the tubing which was sold to bicycle pump manufacturers and for such things as handlebar grips, etc. In those days the non-inflammable base had not been invented and the base used for cinema films was almost pure celluloid. We had a special machine for stripping the emulsion from the film in boiling water and then converting the base into pulp, after which it was put through an extrusion press.

The Company ran into technical difficulties, arising mainly from the fact that the sellers of the disused film started de-facing the reels by cutting into them in order to prevent the films being re-used. This completely upset the stripping machinery. I did not exercise my option, and I am glad that I had made the condition of a preliminary period.

I mention this interlude because it emphasises the desirability of an option period before investment. I would strongly recommend any man considering investing his money and his time in a business, to insist on a trial period before committing himself. Many pitfalls could be avoided.

In 1925 I registered W.H. Colt Limited as a Company. But I must go back just over twelve months to the time when I left Charles Diamond. I had kept in touch with my old friend, R.G. Pye, the Accountant, and through him I was introduced to Mr. W.H. Colt. Colt was a German who had lived for some considerable years in this country, and who was quite a brilliant salesman.

Before the 1914/18 war he had been selling BRUNSVIGER German calculating machines in the U.K. He was interned during the war and during his internment had worked at carpentry and joinery. He had an English wife and a small house at Bethersden in Kent. There, after the war, he started a business making timber buildings, principally Poultry Houses. His market was mainly in the large industrial poultry houses, up to as much as 100 ft. long by 25 ft. wide. Incidentally, his main selling point was based on the importance of ventilation in a poultry house. This he achieved by an interesting baffled slit right along the eaves of the houses, resulting in a gentle movement of air across the house, from whatever direction the wind happened to be blowing.

At the time I was introduced to him by Pye, he had just commenced launching out into designing and building domestic timber houses, starting with small bungalows. Pye told me that he was a straight and honest fellow, showed me his accounts for the three years that he had been running, and told me that he needed more capital and also a business partner. I met Colt, liked him, and took a considerable amount of trouble to go round his customers with him in various parts of the country. Finally, I decided to work with him for an experimental period before finally tying up with him. I am not quite sure how long we worked together in this initial period but it wasn't many months. I began to have doubts and decided against going ahead together. This was in 1924.

In 1925, Colt again approached me, asking me to reconsider the matter and I finally decided to join him and form a Company. I stipulated that I must have a controlling interest in the Company, but apart from this, profits and losses would be equally divided. Colt, I remember, suggested that the Company should be O'Hea & Colt Limited. However, I felt that my name was an awkward one as part of a company's name, whereas Colt's name, in my view, was very suitable by itself. Incidentally, I was not aware until several years later that Colt was not his real name. His real name was Gleischner. He took the name Colt when he first came to England. It was his wife's maiden name.

Colt was brilliant in many ways. He was considerably older than me. He was an excellent salesman and he was one of the few individuals at that time who appreciated and used large display advertising in the National Press. In fact, before the war, when he was selling calculating machines simply as an agent, he took 8" x 4" display spaces in the daily papers. At that time such display space was used only by very large firms.

Our joint efforts were directed to developing and increasing the domestic timber house side of the business and, at the same time, pushing ahead the sale of large commercial poultry houses. We were one of the first exhibitors at the Daily Mail Ideal Home Exhibition and year after year we had a timber house there, the last one being quite an imposing two-storey house.

There was much of interest and excitement in this period of our business together. One interesting development was a special type of cottage designed for the miners in South Wales. It was 1926, a period of terrible depression in the coal mines. The then Prince of Wales, amongst his many activities, particularly espoused the cause of the distressed miners. We built a specimen house and erected it on the then vacant land adjoining Bush House, and the Prince of Wales officially opened the building with much press publicity. I remember an amusing incident in connection with the opening. A friend of mine, Millard Buckley, was the Advertising Manager of Rolls Royce. He asked me if I would mind if he parked a Rolls Royce car adjacent to the entrance of Bush House where the Prince of Wales would come in. In spite of the fact that I knew he had some clever stunt afoot, I gave him permission. The Prince of Wales, incidentally, owned a Bentley which at that time was not owned by Rolls Royce. The Prince duly arrived in the Bentley, and as he was walking past the Rolls Royce, Buckley had arranged for a photographer to catch him, just as if he had got out of the Rolls Royce. As far as I know the photograph was never used.

We kept up the publicity for this demonstration house at Bush House, week after week, by getting various wellknown people to come and inspect it. One of them was Lady Asquith. She was a wonderful person for self publicity. It was arranged that I would call for her at her town house with a car and take her to Bush House. I was ushered into her house by the butler, and Her Ladyship descended the stairs in her most beautiful attire. She looked out of the front door and demanded to know where the photographers were and why I hadn't brought any.

It was in 1926 that I first realised the commercial possibilities of Canadian Cedar Shingles. I had seen them at the British Empire Exhibition at Wembley in 1923 on two Canadian timber houses which were on exhibition there, and which particularly took my fancy. In 1926, a firm of Timber Agents in London, - I remember the name, it was Cudemore and Taylor, - came to see me at our offices in Bush House and tried to interest me in these Shingles.

I discussed the matter with Colt and after obtaining a good deal of technical information from Canada, I decided to import some. So in 1926 the first commercial load of shingles from Canada was imported by us. I don't know how many thousands of buildings have since been roofed with shingles in this country. Many of those roofed before the war are still perfectly good today.

In my early business career, I laid down certain principles for myself which I feel have stood me in good stead. I wanted, as I have said, to be my own boss, or if in partnership, to have a controlling interest with a partner with whom one could readily and amicably work, supplementing and complimenting each other.

My second principle was that although one must have some basic business, one must also have a number of different baskets for one's eggs and be always on the lookout for diversification. I realised of course the danger of diversification into lines and fields of which one had inadequate knowledge; and in my business career, I have frequently broken the cardinal principle of the cobbler sticking to his last.

My third principle was that any new line should be a speciality in its own field with an advertising potential. It should preferably offer a novel method of marketing.

My fourth principle - and one which I admit to breaking frequently - was, not to embark on any new project without a thorough preliminary market research.

My fifth principle was that, if possible, I would avoid manufacturing.

I recently came across a statement by Lord Pilkington which expresses my own views on some of these fundamental matters. He said:

"The business executive must be positive. He must be enterprising; he must take risks; and his judgment will sometimes be right and sometimes wrong; he must realise that in taking risks there will always be a chance of failure; and therefore the rewards for successful risk-taking must cover the cost of failure too."

Looking back over the years and counting up the number of my egg-baskets, I come to the rather extraordinary total of 19 different projects that I have put on the market. I take a little boastful pride in noting that although most of them have fallen by the wayside, only one, COLTERRO, lost money. It is perhaps interesting to put on record what these nineteen were.

I am not sure that I have the chronological order strictly correct :

#### SONDIX BROODERS

A man, by name, R.A. Dixon, a poultry farmer in Whitstable, Kent, had invented a new and advanced type of brooder which he called The Sondix. A brooder is an artificial hen, consisting of a heated canopy under which as many as three hundred day-old chicks can be coddled and brought to maturity. The design was sound and in advance of its time. It was made in three different sizes for 100, 200 or 300 chicks. Dixon had been making these Brooders for two or three years and we were thoroughly convinced, from talking with his satisfied customers, that his method of uniform heating and ventilation got the chicks on quicker, and with considerably less loss of life. We took over the entire rights and, for some four or five years, this was the leading Brooder in the commercial poultry industry. Several thousand pounds' worth were sold. There was no patent and eventually competition in the form of electric mass brooding and other methods replaced it.

#### CEDAR LOG SIDING

This was a natural adjunct to Shingles. We imported it from Canada in the form of cedar timber manufactured into half round logs, so that the outside of the building had the appearance of a log cabin. Considerable quantities continued to be sold right up to the time of the war.

#### CAEMENTUM

This was quite a remarkable material. It was made by a secret process by an Englishman called Dopson, in Dieppe. It consisted of crushed Caen stone mixed with cement and bonded with some bonding agent. It was supplied in liquid or semi-liquid form of various consistencies according to the application. It could be brushed or sprayed on to the outside walls of a building and gave the appearance of stucco, rough-cast, etc. It had the quality of adhering to almost any surface. There was nothing else like it on the market. Some of the grades produced a quite heavy rough-cast finish.

I formed a separate Company, W.H. Colt (Caementum) Limited to handle this material. It is interesting to note that later on I made use of the same company by changing its name to W.H. Colt (London) Limited. If the early files are still in existence at the Company Registration Office, it will be seen that W.H. Colt (London) Limited was originally W.H. Colt (Caementum) Limited.

I remember one amusing incident in connection with this material. An American, a Mr. Gavin, had brought over to this country a novel building method, called the Janvin-Lambie system, the principal merit of which was the rapidity with which a concrete house could be built. He had an enormous machine which was moved on wheels to the building site, and which was fed automatically with cement, sand and aggregate in the appropriate proportions, and mixed together. (It was before the days of ready-mixed concrete.) The concrete was delivered up a chute and poured into a cleverly designed patent form of steel shuttering. The process was so rapid that you could almost watch the walls grow.

In order to launch the project and to interest local authorities, he arranged for a demonstration house to be built on a vacant site near Victoria Station. He contracted to build and furnish the house in seven days with unskilled labour. He had three technicians of his own, a foreman and two mechanics. He engaged a detachment of, I think, it was 12 naval ratings from Portsmouth. I heard of this project and managed to persuade the man that Caementum was ideal for the purpose, and we could apply it to wet concrete and that it would stick. The time schedule was very tight and I remember myself spending two nights and two days on the job. On the morning of the third day I was found asleep on a pile of gravel.

We managed to get the Caementum to stick on all the walls but there was one particular patch, just by the front door, which for some reason absolutely refused to adhere. I told Gavin that the only thing to do was to buy a standard evergreen plant in a tub and stand it in front of the patch. He immediately agreed and gave me his credit card number at Harrods. I shot along there and brought back in a taxi a wonderful bushy evergreen shrub. Unfortunately I had taken the measurements incorrectly and the bushy part of the shrub was right above the patch, leaving a bare stem down to the tub. I realised that the only thing to do was to cut off the root in order to drop the head so that it covered the patch. This I did. The house was on show for some weeks. A week or so after the opening, the shrub began to wither. It was discovered that it had no root. The American thereupon tore a strip off Harrods.

It was not until some considerable time afterwards that I learned of this and was able to put the record straight. Incidentally, the house was furnished by a wellknown cheap furniture manufacturer and I remember that the wardrobe wouldn't go up the stairs and so one of the bedroom windows had to be taken out and the wardrobe taken to pieces and pushed through the window. On taking it apart, a large piece of timber was exposed with 'Tate & Lyle' on it.

I mentioned that Caementum was made under a secret process. I tried on several occasions to get Dopson either to disclose the process in confidence, or to arrange for the formula and method of manufacture to be deposited by him in some safe deposit. He always refused to do so and he died. Caementum died with him. I have a hunch that today Snowcem may employ the same bonding agent.

#### THE COLTAGRAPH

This was a most ingenious instrument manufactured in Germany. It operated on the principle of a pedometer. Encased in an aluminium case was a clockwork mechanism driving a circular chart, against which a pen inscribed a continuous line so long as the Coltagraph was not moved or jolted in any way. Immediately there was any movement of the instrument the pen, which was attached to a finely balanced weight, waggled on the chart, and produced a wider line. The instrument was quite small. There were three different models - a 7-day, a 1-day and a 12-hour model. It could be attached to any piece of machinery or screwed into the cab of a vehicle, and it recorded accurately the periods of working and rest of the machine or vehicle. Incidentally it is this very type of instrument which recently threatened a strike amongst lorry drivers.

We sold many hundreds of these instruments and unfortunately the sale had to stop because of the war. It is interesting to know that, when fixed to the cabs of motor lorries, we had a great deal of trouble through attempts to damage the instruments and put them out of action. The instrument had a clock face visible to the outside and usually, when the instruments were sent back to us for repair, there were signs that they had been struck or tampered with in some way. Carter Paterson, I remember, bought a lot of these instruments and in their case the instruments were being sent back to us with no apparent sign of tampering in any way. Quite by chance, we found out that the men had discovered that if the instrument was struck a blow with a piece of rubber such as a strip of motor car tyre, the hairspring of the clock was put out of action, and no mark was left on the casing.

Three other lines in connection with the Poultry industry were marked by us and are worth mentioning:

*Erased*



### COLT TRAP FRONTS

It is essential for commercial breeders of poultry to know, not only which of their hens are laying eggs but how many eggs each hen lays in a year. The usual way to do this is to fit to the front of the egg nests a device which automatically shuts a hen in when it has gone in to lay an egg. An attendant periodically goes along releasing the birds and recording the number which is on a little metal band clipped to the bird's leg. Various trap fronts were on the market for this purpose and a particular one that I invented had certain features which put it ahead of others. It sold quite well but was somewhat more expensive than other simpler fronts.

I always had a tinge of regret that we never put on the market a most amusing device which was offered to us, which would have taken the place of Trap Fronts and greatly reduced the work involved in trapping birds. The device offered to us consisted of a miniature harness strapped to the body of a bird; underneath was something like a rubber date stamp which automatically stamped the bird's number on the egg as it was laid. This would have entirely obviated trap nesting, as all the attendant had to do was read and record the numbers stamped on the eggs. It was ingenious but not really practical.

### COLT TESTER TORCHES

Every egg, before it is marketed, has to be examined for blood spots, etc. The only way of doing this is by shining a light through the egg. The Colt Tester Torch was a very simple battery-operated cup mounted on an ordinary torch battery. Many hundreds were sold. It was advertised, as in fact were other Colt Poultry products, extensively in the Poultry Press and also at the Dairy Show. It was not a particularly profitable line and it died a natural death.

In the early days of Colt Ventilation Limited, we had an interesting experience with the National Physical Laboratory which led to an alteration in their regulations. The Colt Agricultural Building ventilator, which incidentally was very similar in principal to the Colt Cowl, had a considerable number of competitors. We had ourselves tested the Colt Ventilator in our wind tunnel against its principal competitors, and found that from every direction of wind and under every condition of use, the Colt was better.

We contracted with the National Physical Laboratory to test a 6" diameter Colt Ventilator against 6" diameter ventilators of three well known other makes. The N.P.L. confirmed our claims in every way. The results were tabulated at various wind speeds and angles of wind. The ventilators were named A, B, C & D. Attached to the report was a plain sheet giving the key to the identity of each. I published this report and the key sheet.

Furious objections were raised by our competitors and the Treasury Solicitor wrote to me, threatening legal action if I did not undertake to stop publication. This was a silly threat. I pointed out that the printed condition on the report merely stated that no publication of the report was permissible unless it was the whole report and how had I transgressed. Nothing further happened, except that the N.P.L. were instructed that in future no comparative testing, except at the written request of all parties.

#### THE COLT LATCHLOCK

This was a very ingenious combined latch and lock which could be fitted to any door. Its use was mainly for such things as the doors of poultry houses, garages, lock-up sheds and the like. It replaced the usual hasp, staple and padlock. It was screwed into position on the door and the jamb of the door, and when locked, all the screws automatically were covered. It could not be unscrewed without being unlocked. This was made for us at Willenhall, the great lock-making town in the Midlands, and many thousands were sold. I patented it and eventually sold the rights to the lock manufacturer.

The Colt Latchlock was sold mainly through advertising in the small display spaces of the Daily Mail. But I remember that for a time I experimented with a direct sale method which was as follows:-

I had a carton made which was sent to hundreds of people whose addresses were taken at random, inviting them to buy the latchlock or return it. A stamped addressed carton was enclosed. The price was 3/9d. The method worked, and I don't recollect any resentment. I didn't like the method, which somehow smacked of the door-to-door salesman putting his foot in the door. Recently this method has been made illegal.

Diverging for the moment from listing the various baskets of eggs, I would mention that the period 1929 to 1931 was a very worrying time. It was the time of the Great Depression. There had been a complete industrial collapse in the United States of America, followed by a collapse over here.

Business became extremely difficult and it was the only period of my business life when losses were made. I have always rather taken pride in the fact that not one of my staff was dismissed, although several of them really were passengers as a result of the reduction of business. All of them were kept on full salary. I have always felt that 90% of one's success in business is choosing the right staff and playing more than fair with them.

#### COLT VENTILATION

In 1931, I formed Colt Ventilation Limited. Through Colt's Germany connections, we met Heinrich Kuckuck, a brilliant aerodynamic engineer, who had a small business in Bremen. Kuckuck was an absolute genius but never seemed to be able to commercialise his inventions. He was the protege of a fairly wealthy German businessman who marketed his various ventilations - at that time principally vehicle ventilators - throughout Germany. I was particularly impressed with his knowledge and arranged for him to come over to England for six months, together with his wind tunnel and other apparatus to see whether we could develop a business in that field in the U.K.

We quickly got things going over here. Kuckuck's patented wind tunnel was installed in Bush House, and the National Physical Laboratory were so impressed with it that they asked permission to copy it. It was, I understand, the first continuous wind tunnel that they had ever seen.

In course of time the Colt B.S. Vehicle Ventilator for buses and coaches became the universally accepted ventilator. There were two on the top deck of every London bus and three on the roof of every Green Line coach. In addition, it was sold to almost every coach body-builder in the country.

It was not long before we got Kuckuck going on Industrial Ventilators, and various types of roof ventilators to his design were marketed by us. The early ones followed the style of the Robertson ventilator. Kuckuck's improvements being mainly curving the outer circular shield, thus causing the wind to be thrown off the shield and producing a greater suction inside; and also an extremely ingenious type of ventilator which tilted into the wind.

Another roof ventilator which had great promise but which we never got very far with was a combined intake and extractor in the one tube.

At the same time as selling ventilators, we endeavoured to develop a consultancy service in ventilation. Kuckuck used to come over for varying periods of approximately 3 months at a time on an ad hoc project. There were several of these projects, and all of an interesting character.

We designed a special type of scoop inlet ventilator for the new coaches on the London Underground. This type of ventilator is still the standard form used. I remember travelling many miles in an experimental train, up and down the Tube lines, with Kuckuck jumping about from instrument to instrument, making various tests.

Another interesting project was put to us by the old London Midland and Scottish Railway Company, as it was then. The driver's cab of a steam locomotive had two circular windows through which the driver could look forward to observe the signals and the track. A new type of express engine had been introduced, and with this particular engine, trouble had arisen through smoke occasionally obscuring the driver's vision through the windows. Kuckuck tackled this problem and we had a model of the engine made in wood, and various experiments were made with the model in the wind tunnel. An absurdly simple answer was found, costing a few shillings. It consisted of fitting a piece of specially shaped metal to the lip of the smoke stack. This carried the smoke right down the centre of the boiler and kept it away from the windows.

Thereafter, all steam locomotives had this simple device fitted to their funnels. I recollect that the L.M.S. paid us 200 guineas for our work.

I must digress here and go back a little to say something about the interlude of the Shepherd Shirt.

In the height of the depression in 1930, Greenlys, our Advertising Agents, introduced me to Tom Shepherd who wanted some office accommodation in London and who was proposing to put on the market a revolutionary new shirt. I had spare office space available in Bush House and I agreed to rent space to Shepherd and give him some of my time at quite a profitable figure. Shepherd was backed by a millionaire, Ian Miller, and the shirt was the invention of a shirt-maker in Brighton, by name, J.A. Packett.