REDLER INDUSTRIES LTD.

Redler Patents Ltd. (Founded 1919)
Redler Equipment Ltd.
Redler Conveyors Ltd.
Redler Construction Ltd.(1960's)
Redler (South Africa) Ltd.(1970's)
Redler Ltd.(1970's)

Incorporating:-
Conveyors (Ready Built) Ltd.(1930's)
Bulkbin Ltd. (1950's)
H.J.H.King &Co Ltd.(1960's)
Vickers Boby (1980's)…etc.

Arnold Redler was born in Tiverton in 1875, the son of a Miller. Around 1900, Arnold and his elder brother Daniel set up on their own in Worcester under the name of Daniel Redler & Co. Ltd. In 1909 they moved to Sharpness Docks and established themselves at Elysium Mills. The start of the first World War only five years later in 1914 brought a shortage of manpower and the 24hour working of a mill led him to look at labour saving and a change to bulk from sack handling and storage.

This led him to experiment with his ideas and before long he had raised patents for equipment to convey and store loose materials in bulk by the end of the war in 1919, Arnold formed Redler Patents Ltd. and before long he ceased flour milling and concentrated on bulk handling. His inventive mind led to many patents including some in other fields such as cinematography yet he had no formal engineering background .

The early days and technology are set down in "The First Forty Years "by a professional writer engaged by Cozens and Sutcliffe in the 1960's. This was augmented by ten pages concentrating on the early technical development which was written by Herbert Chamberlain (London Office Manager) in 1975 when a twenty page customer hand-out was proposed, . Neither appears to have been completed or circulated. The pages written on behalf of Cozens and Sutcliffe include much early research and are colourful telling- amongst other things- how Arnold was a bachelor "married" to a large pipe organ and the problems of moving it from Sharpness to The Lawn, his new home at Cainscross.

In 1925 they abandoned milling but Arnold continued at Sharpness developing bulk handling conveying and storage, also establishing a licencing arrangement with Buhler in Switzerland and National Scale in USA. Inevitably, these licencees evolved their own type of "flighted" conveyor strands One introduced a range of malleable cast detachable links (hook together joints). The other brought in a system of drop forged case hardened links to which a variety of flight shapes could be added by welding Both of these became available to Redler and augmented their "H" chains for elevating and two strand "I" conveying chains for example.

1932 saw the purchase of Apperley & Curtis's cloth mill at Dudbridge as they had outgrown Sharpness His brother Daniel had moved to South Africa and founded Tiger Oats which provided much business for Arnold's systems over many years This meant that Arnold had now lost his "Test House" but his relationship with Reynolds Mills in Gloucester Docks allowed REDLER to use that over many years

As the bulk handling business grew, Arnold engaged engineers such as George Allin from Leys Malleable Castings at Derby(no doubt a supplier of chain strands by this time), James Baker and Leslie Wheatley from Gloucester, and Samuel Forbes from Ruston and Hornsby at Lincoln - to name but a few.

I joined the development department of Redler in 1950 after seven years with Dowty Equipment Ltd. serving an apprenticeship with qualification to Higher National level in mechanical engineering, and electrical at ordinary level

At that time George Allin was Chairman and his son Clifford was Managing Director. S.H.Forbes was Company Secretary with two other directors representing the Whitefield Trust. James Baker was Chief Engineer, Richard (Bob) Parker headed the Project Office, Neil Lawson headed Sales, Leslie Wheatley Buying and Bob Short was Works Manager. Herbert Chamberlain ran London Office in Victoria Street and Jack Mitchell represented Redler in Scotland through Aitken & Allen. Tom Phillips was the agent for Ireland. There were many overseas agents, including Dryden Engineering in South Africa.

Eric Wheeler had just established the Development Department and I was engaged to work with him. He had joined the company soon after the end of the war from the works engineers department of the Austin Motor Company having qualified there. At Redler, Eric had established designs for boiler house ash skip hoists and updated the Rocon rotation sensor from oil drag to magnetic drag - amongst other things. . I spent over ten years in that department seeing the design, development and commissioning of circular bin dischargers, bulk throwers, vibratory conveyors, Rediflex, power shovels etc Redler supplied a special conveyor to deliver glass cullet into Pilkington;s first float glass furnace and vibratory conveyors were supplied to the Bank of England to convey used notes to incinerators for example..

A major development came in the early 1950;s when REDLER was approached by Turner Brothers Asbestos to enter a joint investigation for bulk storage and conveying of "opened" asbestos fibre, This meant departure from en-masse conveying and entailed development of a prototype system that was tested in the works. It comprised of a spiked roller bin discharger delivering to vibratory trays underneath that delivered to a distribution system, This system was unique in that the fibre was conveyed as a blanket on or under the chain strand for delivery to carding machines The system was then moved to Rochdale for further on site development Here we saw all the same problems over months of extracting fibres from deep bulk storage that Arnold had met earlier with powders. Once proven, this led to an enormous amount of business over the years as new factories were built.

In 1950 the Dudbridge site comprised the office block with basement and ground floor. The Development office had been newly fitted out on the top floor in the roof

space.. The works comprised a set of north-light bays and an adjoining machine shop plus several other buildings- including the Clock tower. Arnold Redler had purchased the property all much as built for Apperley Curtis as a cloth mill that had later served as Stroud Power Station It had a tall brick chimney station and this was dismantled brick by brick a year or so after I joined and some of the north-light bays were replaced by two high bays with overhead travelling cranes.

About 1935 he had formed Conveyors (ReadyBuilt) Ltd. in the premises adjacent across the River Frome and H.E.Mutton was M.D. with R.D.Drake in support. R.B. dealt with the market for machines mainly tubular in profile up to 8 inch width using Renold bush chain with swinging flights attached and developed in Dick Wright's days .RB also manufactured Moore vibratory bin dischargers and portable pneumatic Grainvayors whilst Redler handled the full range of sizes using malleable iron or drop forged links and flights. Arnold had also formed Bulkbin Ltd that provided a bulk abstractor system for flat bottomed storage cells based on a novel "shuffling" bottom chain action generated by a Geneva motion

In 1958 the founder Arnold Redler, died at the age of 83 and his companies amalgamated under the joint managing directorship of C W Allin and H E Mutton. In 1960 Redler Industries became merged with Cozens & Sutcliffe Holdings – a London based company . Victor Cozens and Francis Bullimore were the key parent company directors and they quickly required Redler to develop a hydraulically operated mobile jib crane similar to the Hydrocon. This task fell largely to Eric Wheeler as Development but a mobile crane was of course lifting gear with statutory regulations to comply with and was a totally different kind of product with a different market place. Evenso, it was successfully launched and many were sold.

The amalgamation of all the companies with Hedley Mutton as M D combined many departments and saw the provision of a covered bridge across the Frome to link the two premises. Also came the transfer of Development Department across the bridge with a full scale Test Bay facility being built for customers to witness handling of their products . Redler "inherited" Arnold's chauffer Leslie Reeves who now served to transport staff to meetings and customers to and from the airports. Also William Witfield of Bulkbin Ltd who continued in the drawing office until his 80's

About this period S.H.Forbes became Chairman, Hedley Mutton M.D. and John Mason joined as Secretary. Doug Drake became Technical Director and Leslie Wheatley Works Manager.

Cozens & Sutcliffe put Redler back on the market in the late 1960's and Redler joined the Brockhouse Group . The Mobile crane business was then disposed of to Winget. T.N.O. White joined as Sales Director from Spencer (Melksham) and A.D.Smith joined as secretary

In 1962 Redler absorbed H.J.H.King Ltd. of Nailsworth. Kings had started acquiring large turn- key contracts for malting plants but their success was unfortunately over -extending their capacity. Redler were already supplying most of the barley and malt storage and handling on these plants and their greater resources met Kings new needs, so Kings was absorbed into Redler.

Around 1970 a contract for five grain silos and a flour mill had been awarded to Redler by the Iranian government with a total value of over £40,000,000. It included all of the site infrastructure and the concrete slip-forming of the silo blocks and workhouses, the actual Redler content still being many millions. Consequently, a separate company Redler Grain Silos Ltd. was formed to handle the overall contract.
When Hedley Mutton retired Tommy White became MD and then a Divisional Director of Brockhouse . Doug Drake now became MD. Bob Parker was Technical director – who I succeeded for the next ten years when Bob retired in 1974. Ian McCullum was now Sales Director.

As the U.K. changed to become a major exporter of grain in the 1980 period, Redler supplied several 1,000 tonne per hour ship loading installations around the UK This involved modifying existing travelling dockside cranes by replacing jibs with boom conveyors and ship trimmers as well as providing the usual reception and storage handling facilities.

The combined company now grew to over 500 employees as the handling and malting business grew and exports rose such that the Company achieved the Queen's Award for Export Achievement in1980.

Whilst the handling business grew, the malting industry went through a period of saturation and it was several years before a new phase of investment came by developing single vessel malting technology in all metal circular maltings. Two 300 tonne capacity rotating floor vessels were built in Scotland and later a circular concrete tower malting was built in Burton. During this period two malting plant suppliers were taken over. Nalder & Nalder of Wantage and Vickers Boby. This left Redler the only U.K. supplier of malting plant technology.

The entry into process plant supply now made the company name of Redler Conveyors Ltd. unsuitable for its growing versatility. There was now a separate Electrical Control division making control panels- often for competitors- and Redler offered many customers design, manufacture and commission services.

It was therefore decided to change the name to REDLER Ltd. whilst retaining all of the existing Trademark protection and associated details. Marketing was now based on a full capability for design and build on a broader field.

Trading, sadly, had become poor in the Brockhouse Group's many other U.K. and overseas companies and, consequently Brockhouse was taken over by the Evered Group. R.D. Drake retired in 1984 and B.R.Gabbett moved from marketing to become M.D.

A few years later Redler and Triangle Valves broke away from the Evered Group and formed Bidmine Plc. The malting technology business was now again saturated and it was sold off to Qualter Hall who later disposed of it to Don Valley Engineering.

In the late 1990's Redler moved into the ownership of Buhler Bros of Uzwil Switzerland – the licencee established in the 1930's. They had developed into a competitor after the war. The manufacturing side remained with Bidmine but conveying chain manufacture was moved to Italy and, in due course, Bidmine moved

off the premises. Buhler continued to operate the marketing, technical and company functions in the Office Block

Soon into the new century Buhler put Redler back on the market and in 2004 it was purchased by the Stock Equipment Corporation USA. Stock had for a long time been a competitor in power station coal feeders around the world and offered a package including control sensors and monitors with the actual coal feeder so that continuous analysis of performance could be made.

The new association saw Redler selling Stock feeders as they continued with their own established range of handling equipment and accessories with manufacturing being purchased out. A Redler subsidiary was established in India to take advantage of far east contracts.

More changes followed as Redler still operated from the Office block I knew – now known as Redler House but much changed in it's air conditioned fully carpeted computer control environment –but with the vital sample room records still in the basement.

Redler next moved into the Schenk Process Group and in 2015 Redler finally vacated the Dudbridge premises to operate from an office at Stonehouse with manufacture movine to Doncaster.

This change led to information on Redler being deposited in Stroud's Museum in the Park with a two week display and presentation – including the Queen's Award Trophy and numerous brochures, photographs etc.

Here follows a few specific topics from my days :-

London excursions

When the MHEA Exhibitions occurred at Earl's Court, the company would arrange a train party and all employees had a Saturday trip to visit the show and then have the day to themselves before an "after show-time" return

The Castle

In the early 1950's design draughtsmen were in short supply locally and this large house in Stroud was purchased and converted into five or six flats. This brought draughtsmen from the Midlands and later the flats became popular with the younger employees before getting their own property.

Redler Sports and Social Club

There were Football and Cricket teams and this developed into sections for fishing (the Frome ran through the works) Golf , Skittles etc An annual Christmas Party was held for the children with Fred Fowler as Father Christmas - the groundsman for the cricket field- and a character! The interdepartmental skittle matches were played at local pubs but the inevitable boisterous noise let to bans. By now the Club was prospering and about 1970 they acquired the floor above Bateman's Sports shop in Stroud. This had a bar and barman and was a venue for skittles etc. for many years

The Silver Link Club

On completion of 25years service, employees were presented with wrist watches at an annual ceremony. Mine came in 1975 just before I became Technical Director. The Company arranged a dinner with all existing members when new members joined and had their presentations but this ceased in the 1980's.

In later years the" Redler Link" came into being through R.D.Drake's efforts. This comprised an annual luncheon open to past employees and gave opportunity to meet and reminisce and raise a glass to Arnold Redler's photograph

The Sample Room

This was situated in the office block basement and held thousands of bottles containing samples of materials supplied by customers for record purposes. Each bore details of loose bulk density, angle of repose etc..

The Filing Room

Files of correspondence were held for every proposal and order by the typing pool which also operated an internal post system Similarly, there was a room for Drawing office records with a retrieval system.

Data Base and Metrication

These developed around the same time that. Brockhouse established a computer link, and terminals were installed for commercial business and a Data Base was set up in the Drawing Office. Gradually, documentation grew and metrication of both calculations and dimensional records took over. Works saw the introduction of metrication in tooling and other services

The REDLER" en- masse" computer.

This was a circular calculator for machine selection for a customer's requirements, It comprised a pair of rotatable discs graduated to allow entry of a duty to establish the options of machine size and was a quick guide for salesman

The Test Bays

There was a full size Redler test system comprising circular bin dischargers and circulatory conveying systems in which customers products could undergo witnessed trials. A similar system with RB conveyors and a Moore vibratory Bin discharger was available for demonstration.. These systems were also used for any development trials

The Canteen

A war-time British Restaurant existed opposite the works but closed in1950. Some years later Redler acquired most of the properties opposite for car parking and a canteen was built. This comprised works and staff rooms and was useful also for presentations, children's Christmas parties, etc.. There were many home and overseas visitors who had to be entertained at local hotels until a visitor's dining suite was built over the staff canteen. This had a lounge area and was much more convenient for private business use.

The First Aid Room

In later years a First Aid room was established with a registered nurse. When John Chesterton a construction supervisor on grain silos construction in Iran was injured in

a road accident; the nurse was flown out in a jumbo to accompany him back on a stretcher to Gloucestershire Royal Hospital,

The Conference Room

This was used for meetings with customers and also for internal meetings .After the linkup with Kings of Nailsworth, it gained the large axminster carpet and also displayed Henry King;s 0 – 3 inch micrometer featured in ”Engineering in 1869.

The Generator

A large modern diesel generator for electrical power had been installed and this was “run up” regularly. It came into its own when national power supplies were limiting working periods. The generator set was able to supply lighting and run some machinery to keep the works open.

The Chain Shop

This was a vital part of manufacture as it had to deal with the considerable amount of spares business of all earlier types as well as conveying chains for new machines.

New supply became entirely based on a range of high tensile drop forged links that were machined and then case hardened. This entailed cyanide heat treatment and quenching of the links followed by attachment of the appropriate flights by flash butt welding A sample from each batch of links were tensile tested to destruction for traceable recording.

Erection, Commissioning and Service

The staff of erection department rarely- if ever- saw Dudbridge works as their time was spent on customer’s sites at home or overseas. Large contracts could last years and a compound with full services would be established, Service staff were available at all times.

Training

There had always been an apprentice scheme but this evolved in the 1970’s into a lecture room etc. giving educational needs to satisfy government training levies. The local technical colleges were used for day release education and some apprentices took sandwich courses at Loughborough or Brunel Universities for example. In the 1960’s Peter Brown became a design apprentice attending North Gloucestershire Technical college at Cheltenham and gained his HND with six distinctions and the award of the National Diploma Prize, Peter Brown became Development Engineer

Trade Associations

Redler always had membership of the disabled Employers and the Engineering Employers Federation. Many staff were members of the Foremen & Staff Society ,A.E.S.D. , T.G.W.U., and AU.E.W..

M.H.E.A.(Mechanical Handling Engineers Association) served bulk and unit handling manufacturers. The association and its committees were in turn part of F.E.M. (Federation Europeanne Manutention) which covered most of the similar associations in Europe.

Redler also subscribed to A.B.T.A (Allied Brewery Traders Association) and The Institute of Brewing.

Overseas Manufacture

Apart form the original licencing of National Scale in the States and Buhler in Switzerland with use of the Trademark, Redler (South Africa) was established in the 1970's. National Scale passed the licence to Stephens Adamson of Aurora 'Illinois in the 1930's and they had several factories supplying extensive bulk handling installations. This meant that there was reciprocal licensing of some of their products by Redler.

Buhler became a major competitor after World War II selling as" Buhler – Redler" and this hampered our markets on some areas.
REDLER (S.A.) was formed in the 1970's and reported to Stroud .Ken Busknell went out and managed it for some years and his memories written in 2009 expand well on the south Africa area- and also larger major contracts that came after my time.

There were many co-operations formed around the 1970's in Italy, South America, France, Norway, etc. with Redler supplying the conveying chain elements and driving sprockets and manufacturing drawings for local manufacture of casings etc by the co-operator.

The Queens Award

In1980, REDLER successfully applied for an Award for Export Achievement.. This had to be based on growth of export. Bearing in mind that there had always been a high level particularly into Commonwealth countries this entailed a considerable increase and it was largely gained by the overseas co-operations and the high demand for grain storage facilities in the Middle East. The Award was made by the County Lord Lieutenant in the new Despatch building with all employees present.

Middle East Contracts

As the Middle East oil problems settled down, many of those various countries invested in grain storage and import facilities.

Redler was involved in Iran, Saudi Arabia, Kuwait, Yemen, and Iraq for example.

Iran's Shah awarded contracts to Russia U.K.(Redler), Germany and Italy shortly before he was deposed. However, the Ayatollahs honoured the contract in due course, Redlers order comprising five storage facilities up to 100,000 tonne capacity with a flour mill attached to one site at a total value of over £40,000,000.Each site included all accommodation etc. and a lot of reinforced concrete work in
slip formed Silos and machinery towers. A Redler Grain Silos company was therefore formed in Iran to handle the total contract and Redler took a sub-order of many millions. Deliveries were made over the next three or four years.

"Industrial Espoinage."

Two cases are known of "Industrial Espionage"- the first involving one of the "recruited draughtsmen "and the other in Southern Africa.

In the first case, the employee left and joined another company in the industry - but not a competitor It was learned that the draughtsman was endeavouring to obtain discarded manufacturing drawings from the works so C.W. Allin met the M.D. of the other company and ,after confrontation, the one in question was dismissed.

In Southern Africa, some employees had left the Redler (S.A.)company and it was found that a new competitor was active. This led to a full investigation and legal action was featured in the press as an example of abuse of registered copyright - again by use of Redler drawings.

Young Enterprise

In the 1970's a national scheme was introduced for schools to set up groups of pupils as a "company" .Local schools joined in and Redler supported a group each year as they competed for area prizes. They set up their management structure, chose a product and manufactured and sold it. They used the redler canteen afternoons for meetings and manufacture with the guidance of Redler staff.

Ken Poulton 2015