

SOME NOTES ABOUT REDLER

The company was formed by Mr. Arnold Redler, who was a Flour Miller operating in Sharpness Docks at Severnside Mills. At the end of the First World War small Flour Millers were suffering badly, all the wheat for milling was imported and fortunes were made and lost in brokering. This ultimately resulted in the demise of the smaller Flour Miller and today flour is produced 100% in large mills, most of which still operate in coastal regions.

He also suffered from shortage of personnel which meant he had requirements to store quantities of flour before it could be bagged off. Difficulties in discharging flour from bins made him search for a method of assisting the discharge, resulting in his first patent in 1919.

Mr. Redler was an unusual character, he and his brother remained lifelong bachelors, but Arnold suffered badly from deafness giving him a somewhat introverted and grumpy countenance. He could be very single minded and he dedicated himself to his effort to exploiting his new idea for a Chain Conveyor, and the system which is quite generally known as the 'en masse' system, or frequently the REDLER system.

Being a bachelor he did not have any children (as far as we know) and the name Redler appears to be unique. Arnold's brother emigrated to South Africa where he built up the company Tiger Oats as a very successful business.

Arnold Redler died in 1958 and by then was living a very healthy lifestyle. He had created a great deal of wealth for himself - he had a Rolls Royce, a uniformed chauffeur, his own yacht, and a small mansion which contained a valueable pipe organ, since music became his hobby - in today's terms he would have been a multi-millionaire.

There are many stories about his idiosyncrasies, such as a habit of waking in the middle of the night with a brilliant idea. Since he was a batchelor these were generally concerned with Conveyors, but he also had a habit in later years of telephoning the General Manager at any time of the night to talk over his new brainwave.

As he was around fifty when he first invented his machine he realised that time was not on his side and made his money by licencing his product in many parts of the world. This has resulted in the totally enclosed Chain Conveyor being generally known worldwide as the REDLER Conveyor in much the same way that people refer to a vacuum cleaner as a 'Hoover' and the vacuum flask as a 'Thermos'. Even in China, Japan, Argentina and Brazil the name REDLER is extremely well known.

Talking of his idiosyncrasies, legend has it that having concluded a major deal in New York he almost missed the sailing of the Queen Mary back to England and arranged for the ship to wait for him, no doubt at great expense. The story goes that he then spent ten minutes arguing with the taxi driver on the jetty about the fare whilst the ship was waiting in the Port.

THE PRODUCT

The basis of the invention is a phenomenon, whereby a skeleton chain or similar, running in the base of a trough or trunking, will carry a considerable depth of a granular product in the form of a solid column with minimum movement between the granules - (illustration No. 1). Although this was originally for small capacities, Redler now make machines up to about 1,500 tonnes per hour and up to about 160 metres in length utilising exactly this principle. Surprisingly the system

operates vertically or at any angle of inclination, although the flight attachments to the links are slightly more complex on the uphill movement. All sorts of theories have been put to this phenomenon, but the nearest analogy is that particulate solids behave in a similar fashion to a liquid as long as the pressure on the material is applied throughout its length. Thus in the case of Elevators the behaviour of the materials is very much as for a self priming pump in that volume entering is equivalent to volume discharging.

Although the product was developed out of necessity, it was fortuitously far ahead of its time and lends itself to many of the special requirements for mechanical handling equipment laid down by modern H. & S. regulations. REDLER Conveyors and Elevators are totally enclosed and thus safe, they are dust tight, rigid in construction, do not have enough free air to support combustion, and are therefore not a fire hazard. They are waterproof and reasonably quiet.

By their nature they are a volumetric feeder and the system has been developed in many areas to include explosion proof feeders, such as are required in power stations and which are marketed as the Generation 2000 Coal Feeder. Castle Peak Power Station of Hong Kong has twenty-four of these units and over the years a number of installations worldwide have been provided.

The REDLER system has been developed in the many industries where particulate solids have to be handled, and Redler is one of the major players in the world market for grain storage and handling, particularly in port installations.

There is a company boast that it is actually quite difficult to buy a product in the supermarket that has not at some time in its process passed through a REDLER machine, such industries include Andrews Liver Salts, Aspros, Anadins, breakfast cereals, bath cubes, Harpic, etc., etc..

The machines are used extensively in the chocolate industry, but also in heavy industries for handling cement, cement clinker and for airborne dusts such as are collected in steelworks, power stations etc..

Other special machines include the handling of bottom ash from furnaces under water. Redler is one of only a few companies which can offer such units and have orders at the present time for machines in China as well as others already provided to Malta and other European countries.

REDLER machines have been used in Ship Loaders. One particularly interesting application was for feeding some dome stores in Iraq where we had a contract to supply over two hundred units. Indications are that those dome stores were subsequently used as ammunition dumps made to look like grain stores.

CURRENT BUSINESS

Whilst for many years Redler was a company based on a patented product, the business grew into a major player in the overall mechanical handling field and now supplies machines other than Chain Conveyors and Elevators. Particularly it manufactures Bucket Elevators, Belt Conveyors as well as some specialised twin belt machines, and occasionally Screw Conveyors.

As with REDLER machines a fair proportion of our business has been carried out on docksides and we have ship loading plants at Immingham for coal handling at 4,000 tonnes per hour, and also at Port of Ayr exporting coal at approximately 1,000 tonnes per hour.

We receive gypsum down at the Port of Bristol by means of a 384 metre long Reception Conveyor collecting from self discharging ships and feeding their bulk store. Also we can stack and reclaim with our Pendular Bucket Wheel Reclaimer at similar capacities.

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