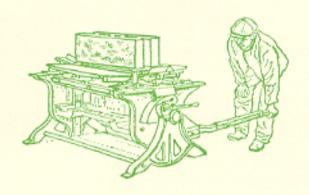
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WINGET LIMITED 1908-1948

PRELUDE TO THE NEXT FIFTY YEARS

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Foreword

The uninformed eye, no doubt, all large manufacture seems much alike, whether it produces paint, sewing machines or concrete machinery, whether it is a private or a public company, expanding or subsiding or maintaining a status quo—just as all postmen look alike to a bull terrier, and all people over fifty to a small boy.

As somebody with a pretty close knowledge of more than one company history, I have another point of view; and so, I expect, have you who are reading these words. You know that, while there are principles of organization, production techniques, research, design and distribution —which apply to almost every manufacturing business, there are also just as many differences between companies as there are between people. Differences of temperament and character, differences of tempo and resource.

Here at Winget Ltd. we suddenly find that we as an entity, have reached and passed fifty. Among businesses, no enormous age. Time enough, however, for us to have established an identity which looks uncommonly durable.

When I first became actively concerned with its management, at the end of 1929, Winget was a young company, newly of age. It was very much the product of its Founder, a brilliant, imaginative, energetic man

who, tragically, died just as his creation had passed through its difficult formative years in a changing economy, and was ready for the maturity

and expansion of its second phase.

Both phases we can now review: the twenty years of foresight, faith and persistence, when John Faulder Burn saw more clearly perhaps than anyone else in Britain the tremendous future for concrete construction and concrete machinery; and the thirty years of Winget's emergence as a force in this particular sphere. In the first period, against much entrenched prejudice, the firm more than proved the soundness of its conception. During the second period, building on the first, manpower has increased by rather more than ten times, from 100 employees to over 1,000, while turnover has increased nearly twenty-six times. The two figures are striking, both on their own and in relation to each other.

I dwell on this second phase, since 1929, not because of my own association with it but because, as the "modern" history of Winget, it is the key to our company's developing character, its present and future significance. In any comparable undertaking, I believe, this is always true—that the second stage is a critical one, setting the pattern for all the years to come. A century-old business can often survive a fallow period, even a period of relative mismanagement. A twenty-year-old business, generally speaking, can not. (In this respect the careers of limited com-

panies differ from those of human beings!)

Since the beginning of 1930 the fundamental characteristics of all present-day Winget equipment have been established . . . a world service has come about, and a world reputation . . . the flexibility of the organization has been shown by judicious ventures in other engineering fields . . . the promise of the first phase confirmed in the second, against the background of an even more destructive war.

In another decade or so, a Winget book will probably be wanted to cover the years following 1938. At present it is my privilege to introduce this one, in the belief that it will help you to gauge the nature and the

future of this business.

Chairman



John Faulder Burn

Chapter One

FROM A CHANCE ENCOUNTER TO AN EMPTY CHAIR

A history has to start at some point in time. It has been suggested seriously—that the discovery of fire by human beings originated with a dead tree smouldering after it had been struck by lightning. (Charles Lamb, you may remember, had a similar theory about the origin of roast pork.) How or when the principles of concrete construction were first applied, whether in Roman or Assyrian or Neolithic times, need not concern us here. For the modern history of concrete is the history of modern concrete machinery—and that is going to take us back no further than 1904.

In 1904 an American engineer and inventor, John McDowell of Columbus, Ohio, was granted a patent in a radically original machine for moulding concrete blocks: copings, quoins, kerbs, and many of the simple and less simple shapes that builders and contractors need. Moulded concrete units were, of course, already in wide use. His new machine, sound in principle and pretty well foolproof, involved a "winging" action of the mould-box doors that both speeded output

and made possible this very versatile range of production.

He called it the Winger Concrete Block Machine and formed, that

same year, a Winget Concrete Machine Company to promote it.

In 1906 a British engineer, John Faulder Burn, was visiting America in search of . . . ideas. He saw, by pure chance, the Winget machine

in search of . . . ideas. He saw, by pure chance, the Winget machine at work, saw the possibilities, saw McDowell. In 1907 he signed an agreement to purchase the British patent rights, for 5,000 dollars. In 1908 he in his turn formed a company: The (U.K.) Winget Concrete Machine Company, with a nominal capital of £3,500 in £1 shares

and with registered offices in West Hartlepool.

As it happened, it was the British Winget Company that flourished, not the American. With the greatest possible respect to the inventive John M. McDowell, may that not have been because it was the British engineer who saw farther and clearer? In 1904, both here and in the States, concrete techniques were still, so to speak, fundamentally Roman or Neolithic . . . a matter of measuring by eye, mixing by spade and moulding by ones and twos. A technical revolution was overdue. John Faulder Burn had the sort of sixth sense that recognizes the inevitable before other people do, and had also the courage and persistence to keep his advantage.

He needed his courage, inevitably. Nobody is so unpopular at first as the man who is ahead of his time—indeed, unless you have a strong streak of practical cussedness too, vision can be a short cut to Queer Street. All the really old-established craft industries, like building and textiles, are repositories not only of technical know-how but of rooted

objection to change.

But Burn was persistent. Also he had a way with other men, both colleagues and customers. He sold his very first Mark I Winget Machine to his co-director Henry Bell, a builder well known in Durham (the machine, incidentally, was still working perfectly more than twenty years later). He sold the second to another builder at Harrogate, who promptly built a garden village with it. He went out on the road himself, with an assistant called "Tiny" (6 ft. 3 in., one supposes), demonstrating the new mechanical principle with the aid of models packed in attaché cases.

Already, by 1911, the (U.K.) Winget Concrete Machine Company was becoming an influence in the building industry. The Metropolitan Water Board was specifying Winget blocks for new reservoirs. The Public Works Loan Authority would grant mortgages on workmen's houses "provided they are constructed in brick, stone or Winget concrete blocks". There were many important private contracts (the demolition, in 1958, of the famous Stoll Theatre in London has now removed one of them). There were contracts with the Home Office, the War Office, the Crown Agents for the Colonies; agreements with Hungary, with Germany . . .

1914, and an end to agreements with Germany. A time of material handicaps and increasing labour difficulties; nevertheless a forcing time for the new business. Early in the war the company was reregistered as Winget Limited. By 1915 the Government was calling for every Winget machine that could be produced, sending many to France. All the standing camps in England and most of the War Office

housing schemes depended upon Winget equipment.

It was, no doubt, the heavy pressure and responsibilities of war contracts which caused Faulder Burn to take, in 1916, a step that must always have been in his mind. Until that year, all Winget concrete equipment had been constructed under contract, largely by the firm of H. A. Davie of Sunderland. There was certainly no strain in this relationship, although the problem of keeping pace with component parts was becoming more and more severe, and the final decision to change may well have been a sudden one. By 1915 Burn was busily inspecting suitable sites for his own manufacturing unit.

Remember that this was still, fundamentally, a small business with small reserves of capital. The site chosen sounds fearsome—a nearly derelict stove and range foundry, destitute of equipment, with a bare sand floor and a broken cupola, set in the midst of allotments near the Grand Union Canal . . . the First World War created allotments by the hundred thousand, but as Winget expanded some of these had to go. Within three months, with the help of a labour force willing to work thirteen hours a day, seven days a week, and with the skilled advice of key people from H. A. Davie's works in Sunderland, the place was repaired, modernized, equipped and transformed. Within four months castings were being produced and machines despatched.

Block machines. Mixing machines. So far we have mentioned only the famous forerunner of all Winget equipment, the moulding machine conceived in America which built for the England of the next decade. Today, when you think of Winget concrete machinery, you think first of *mixers*. Good concrete moulding depends upon good concrete mixing. When did Winget apply this logic:

Virtually from the beginning. By the latter part of 1908 Burn was already negotiating with an architect friend¹ for the right to manufac-

ture and sell a new type of concrete mixer called the Express, a machine of the circular pan type, one of which is actually still at work today! In 1913 the Chain Spade Mixer was introduced. Later came the first British tilting drum mixer, the Warwick; then the famous Burn-Lancaster drum, introducing the semi-helix principle which has influenced so much of subsequent design. In 1925 came the first of the tubular frame mixers, and the first of all the batching-and-mixing plants.

Meanwhile the block machines also, both hand- and poweroperated, were making rapid advances as traditional building materials became scarce in the war economy. Special models were devised for the unit-construction of housing estates—the Winget Pier-and-Panel and Continuous-Cavity systems were not only applied to tens of thousands of dwellings in the years during and after the war, but were

influential precursors of modern concrete building methods.

The great majority of these developments stemmed from Warwick between 1916 and 1929. The range of production was wide, the range of invention far-reaching: from such items as crushing rolls, barrows, elevators and screens to a Winger Automatic Stone Drying and Tarring Plant ("this Wonder plant" said the Daily Mail, economically), which on its very first test run went up in flames forty feet high . . . though later highly successful. One invention, designed by a Professor of Engineering, started life as a mixer and ended up as a most efficient separator. This was a resourceful business.

It was, indeed, a vigorous, imaginative and pragmatic business, taking its inspiration from and giving its loyalty to the brilliant man at the head. There were ups and downs; but by 1929 Winget Ltd. was established, famous, successful, with its destiny clear. And in September 1929 John Faulder Burn died. An era had ended.

Who could replace him? Such questions seem unanswerable, until they are answered.

¹Mr. F. W. Turner, later a Director.





Robert Ducas

Chapter Two

FROM A FOUR-WORD CABLE TO A CAPITAL ISSUE

A governing interest in Winget Ltd. was inherited by John Faulder Burn's widow, who turned for advice to their friend Mr. Percy Lister.\(^1\) A month or two later, Lister met on the Continent a young American businessman who was investigating the German steel industry, and talked to him about the unexpected crisis in Winget affairs. Followed further discussions, an investigation by James Cresswell, London accountant, a confidential report, a terse cabled message to "get on with it" signed DUCAS . . .

Early in 1930, a new list of the Directors of Winget Ltd. was

published, headed by Robert Ducas. The gap had been filled.

The record of the first few years is deceptively quiet, as the new management got the feel of the company and renewed plans for a world market. Came the move to Rochester . . . the expansion of the

³Now Sir Percy Lister, Chairman, R. A. Lister and Co., Dursley.

'thirties . . . the Second World War . . . the intense period of postwar development . . . We are no longer in the past, for the crowding sequence of these events forms one picture, that of the Winger Company of today under the management of today (although, individually, only Mr. Robert Ducas and Mr. James Cresswell, the writers respectively of the short cable and the long report, still represent the original Board of 1930). Let us try to see the picture under headings not merely

chronological.



James Cresswell

After Genesis comes Exodus. The move to Rochester was dictated by the impossibility of further expansion at Warwick. It was also highly indicative of the insistence on planned operations which was to be a feature of the new régime. The creation of the Foundry at Warwick could be described as a triumph of individual geniuses at several levels, of improvisation, experiment and sheer hard work. The transfer to Rochester, by contrast, was so minutely organized in advance that the entire operation was effectively carried

through in one day, only twenty-four hours being lost from the production programme. Output from Warwick ceased on the night of March the 9th, 1934; output from Rochester started on the morning of the 11th. Within a few days a colony of 125 families (many of whom still form the backbone of the firm) had been moved and rehoused.

Both the locale and the decade invite the Biblical comparison; for although Rochester in the 'thirties was an officially distressed area, it had a pool of good engineering labour available. The great slump was receding. The great plague of another war was nowise expected. Expansion was in the air.

Expansion marks the 'thirties for Winget of Rochester, both in range of products and range of influence. By 1934, with a fully automatic foundry, Winget were producing mixers of all major types—with open drum, closed drum, trough, pan, hopper-fed or hand-fed, with or without tubular frames. In addition they were making centrifugal pumps, crushers, hoists, screens, moulds, block machines, tile machines, conveyors, tip-carts, storage silos and batching plants.

Batching, as we have already seen, had first come into the Winget scheme of things as early as 1925. If moulding depends on sound mixing, as surely mixing depends upon scientific batching: in the early days at Rochester the company set a lead in this development which they have ever since maintained, and which has assumed very great importance as large-scale hydro-electric and other comparable civil engineering projects make increasing demands, both qualitative and quantitative. By 1932 Winget were producing plants with beam-weighing gear—the first in Britain—incorporating closed-drum mixers and up to 200-ton aggregate bins. As early as that same year a Winget plant for kerb production, with an output of 120 tons a day, was feeding, weighing, mixing, and discharging under the control of one man at a central panel.

In 1937 the Development Department was formed, anticipating many of the specifications later formularized by the British Standards Institution for the concrete industry in 1936; and pioneering laboratory equipment for most of the concrete research faculties that were to follow.

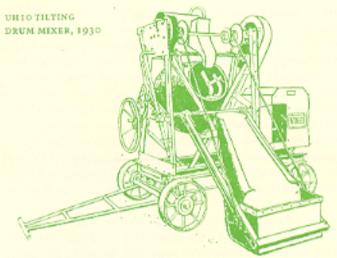
The War Years

For the next six years expansion, origination and development for all "normal" purposes had to wait. Within a fortnight of the declaration the first Winget employee had been killed, on active service with the Royal Navy. The whole facilities of the Company were placed at the disposal of the Government; its scale and standards rendering it particularly valuable for the sort of engineering jobbing work which was either too particular for the big engineering companies or too specialized for smaller, less well equipped shops.

The main stream of Winget activity was inevitably interrupted. Yet the climax of the Winget war effort was, nevertheless, within that main stream, in the construction of the fabulous "Mulberry" Harbour which served the Allied invasion forces on D-Day and after. Of the twenty-five firms of civil engineers that built the huge concrete caissons, no fewer than twenty-two used Winget plant, and Winget pumps kept the chambers clear of water as the harbour was towed across the Channel . . . matters of very real satisfaction to all the men and women who served country and company so loyally during six dark years.

Promise Fulfilled

The moment the war was over, the moment restrictions relaxed



(just a little!), the moment Winget Ltd. were free to pursue their peaceful aims, the Company swept into the main stream again with an impetus which must have startled some of its competitors—and which certainly left no room for any feeling of anti-climax. There was much to be done, for the experience of war had emphasized the rightness of pre-war thinking in terms of technical trends; and the demands of world reconstruction were imperative upon a company which lived by new construction.

There is, as yet, no such thing historically speaking as a post-war epoch. Are we still in it? Have we left it? We are too close to say. To Winget the war was, in one sense, and without forgetting the personal sacrifices of so many, a purely artificial pause in their forward progress, a temporary damming of energy to be released with greater pressure. Some of their most "contemporary" post-war achievements are, in fact, pre-war concepts, delayed but not fundamentally changed by events.

The ten years that followed VE Day were the more intensely active in that greatly increased production had to accompany complete reconstruction of the Rochester works, overdue before the war: there was simply no time for one plan to wait upon the other. The factory, when it was taken over in 1934, was by no means the dramatic desert of the Warwick foundry in 1915 . . . but it had been built, many years earlier, to meet the needs of a famous old engineering firm¹ building

Aveling & Porter Ltd.

traction engines and steam rollers, and was in many ways quite inadequate for the growing demands of Winger production. To the original 7 acres of land further territory was added and new buildings erected.

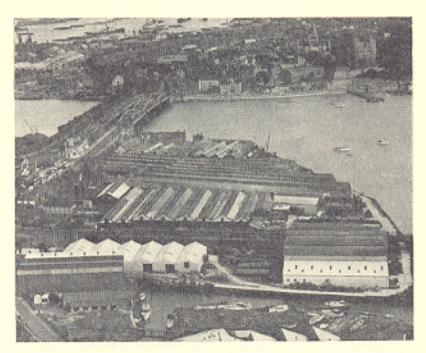
Winget overseas markets were already well developed in 1030,1 By the spring of 1946 the company was represented in over fifty different sales territories throughout the world; and were (for more example) sending batching plants to Trinidad and tilting drum mixers to New Zealand! By March 1949 export sales were six times greater-in value -than in 1938. New divisions were forming at home, moreoverdepartments, either created or expanded, for earth-moving equipment, vibration plant and refrigeration plant, wire mill machinery . . .

Capital for development had become an urgent need. In effect, in spite of the complete change of management, the Company had remained essentially a "family" business from its first beginnings until the early 'fifties. Thereafter, by stages, Winget Limited became the public company that it is today, management and control taking on a broader basis. Directors with wide experience, both in engineering and industry generally, joined the Board, and their influence can be seen in the scope of present activities.

'In many cases, long before that date. The firm of William Jacks & Co. have been Winget Export Agents in the Far East, without a break, since before the First World War !



OS HAND-FED MIXER, 1932



Part of Rochester Works

Chapter Three PORTRAIT OF A COMPANY TODAY

Since the word "present" is merely a conventional term for a thing without dimensions, dividing the past from the future, perhaps this chapter should have been headed Portrait of a Company Tomorrow. The past, as we have seen, stands solid as a concrete raft, fit to carry a sky-scraper. If we look briefly at the trends in each main department of Winget, perhaps we can form some estimate of developments to come.

Concrete mixers are, for many people, synonymous with the name of Winget. Let us first trace the pattern of events in this very important

field, and the part Winget has played in them.

One of the main difficulties in the production of concrete is the large number of variable factors, able to affect the quality of the end product from day to day, or even from batch to batch. Winget influence has been paramount, ever since 1908, in limiting these variables by means of scientific batching and mixing; with constant experiment

in formulae, through the "wet mixtures" and "wet analyses" of the 'twenties and 'thirties to the dry mixes of today.

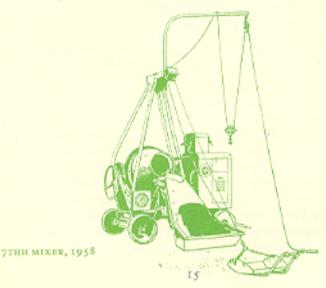
Parallel to these developments, and not less striking, has been the introduction of power controls—electric, pneumatic and hydraulic—to combine speed and ease of operation with greater reliability and

economy.

Parallel again have been notable advances in very large mixing and batching plants, capable of carrying out huge civil engineering contracts in almost any part of the world. Immediately after the war an association was formed with the Kochring Company of U.S.A., which since 1946 has enabled the Winget Civil Engineering Division to design and supply equipment for the world's foremost hydro-electric projects. It seems nowadays a far cry from the Express Mixer of 1908 to the fully automatic plant for the Berkeley and Bradwell nuclear power stations or, for that matter, to the modern small mixer such as the 7THH with hydraulic hopper, weigher and drag feeder.

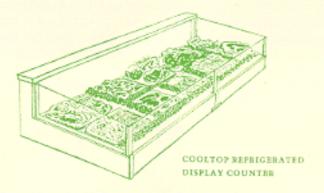
The ultimate future in this field may well be away from the smaller on-site mixer towards large, centralized, highly mechanized supply units distributing ready-mixed concrete over specific territories: in certain parts of the world, notably Australia, this is fast becoming the practice. It will be some time before it is universal, but the Winget Truck Agitator and Truck Mixer point the way here, and technical difficulties which limit the range of their operation (apart from the

road traffic problem) are being overcome.



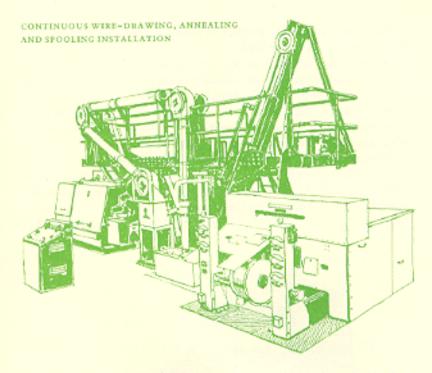
Contractors depend upon Winget, today, for many kinds of specialist equipment, besides developments from the mixers and block machines of earlier days. The latest in block machines, the Winget Rotary Hydraulic, forms blocks not of concrete but stabilized soil! Worked by unskilled labour, it may well be one of the most influential single factors of our time in opening up remote areas of the world. One such departure has warranted a department of its own, the Vibration Department for the compaction and placing of concrete, formed after negotiations with the celebrated Swedish Vibro-Verken Company.

Refrigeration Plant in the form of the Birdseye Multiple Froster came on to the scene at Rochester before the war, in 1938; a specialized engineering activity which is yet another proof of Winget versatility. Since the war, in conjunction with the Dole Company of America, this department has developed rapidly: a separate company, Winget Refrigeration Ltd., now markets such items as the Winget-Dole Vacuum Cold-Plate Evaporator, and the Winget Cooltop Unit for shops.



Finally, Wire Mill Machinery, first undertaken in 1947 after an agreement with the Syncro Machine Company of the U.S.A., establishes Winget in the field of high-precision engineering. The Winget-Syncro range of machines for ferrous and non-ferrous drawing is an important factor already in the firm's export business.

The Winget Foundry we have traced since its first emergence at Warwick, when it took over production of the early block-moulding machines the year before. Today, at Rochester, it not only serves all Winget divisions, but carries out direct contracts, on its own account, with outside customers as far afield as the U.S.A.



Service after sales, of obvious importance to Winget heavy-duty products, has warranted a Service Department which has enlarged its activities at a tremendous rate particularly during the last ten years.

There are now in Britain eight Winget Depots and thirty Service Agent's Depots, while abroad some hundreds of depots are operated by agents in their respective countries.

On the basis of this survey, and without benefit of crystal ball, what

is the picture that emerges of, and for, Winget Limited?

First, surely, we have here a company with unique experience in its field, which ever since its inception has played an influential role in technical development—never more so than today.

Further, we see a company with the resources to pursue its necessary development, and a widely experienced directorate.

Further still, there is proven experience and loyalty at all levels

with long family associations.

We see that Winget interests are already selectively distributed in other specialist branches of engineering and industry—a policy which may well be extended. We note that its sales structure is strong abroad and at home, and that its export sales ratio is high.

We note, furthermore, an eye for engineering advances in other countries, and a number of valuable licence agreements and joint developments. Nothing insular here.

We observe, particularly, that the Research and Development Department on the one hand, and the Service Department on the other, are strong. Two kinds of a long-term view . . .

Who are "we"? You and us—Winget Limited, talking in the editorial plural! And why not? Once in every fifty years a business is entitled to speak up for itself. And we think you'll agree that the next fifty look solidly founded, for a great deal more purposeful progress from

WINGET OF ROCHESTER



TYPICAL READY MIXED CONCRETE PLANT

THE WINGET GROUP OF COMPANIES

WINGET LIMITED

WINGET-SYNCRO LIMITED

WINGET REFRIGERATION LIMITED

JOHN NORTH (FOUNDERS & ENGINEERS) LTD

PLANT ENGINEERING SERVICES (EXETER) LTD

WINGET AFRICA (PTY) LTD

MOORE'S PLANT LIMITED

AIDU EQUIPMENT CO LTD

WINGET SERVICES LTD

