

INSTRUMENT
SOCIETY of
AMERICA



SARNIA SECTION



Monthly Bulletin



The Instrument Society of America

SARNIA SECTION

has as its objective the advancement of the arts and sciences associated with the theory, design, and use of measuring and control instruments in the various industries in the Sarnia area.

The immediate benefits derived by the Sarnia members include a monthly meeting at which a qualified speaker discusses an instrument subject, after which members fraternize with other instrument men and interchange ideas and news at a social hour, a subscription to the "I.S.A. JOURNAL", a subscription to the Sarnia Section "BULLETIN", access to all technical data, servicing techniques and standardization policies developed by the National Committees of the ISA and an annual school for mechanics and technicians.

As a member of the National body of the Instrument Society of America, a rapidly growing and influential technical society, the member partakes indirectly in the progress of instrumentation made possible by the work of the various National Committees.

Executive Officers for the 1954-55 season are:

Honorary President	H. R. HOLLAND, Tech. Supt. I. O. L.
President	JACK HEATLEY Imperial Oil Limited
Vice-President	LARRY HALL Sun Oil Co. Limited
Secretary	BOB BRAYNE Cabot Carbon of Canada Limited
Treasurer	RON ASSELSTINE Canadian Oil Refineries Ltd.

Meetings are held on the fourth Monday of each month from September to May inclusive at 8.00 P.M. The meetings are held at the Sarnia Y.M.-Y.W.C.A. unless otherwise announced.

Anyone earning his livelihood through the manufacture or use of instruments and who is acceptable to the executive body may become a member of the Sarnia Section, I.S.A. Dues are \$12.00 per annum. Associate Members are those who are associated with instruments but who do not earn their livelihood directly from them, such as stationary engineers, process operators, etc. Their dues are \$7.50 per annum.

Correspondence relating to the general activities of the Sarnia Section should be addressed to the Secretary, Mr. R. F. Brayne, R. R. No. 1, Mooretown, Ontario. Dues should be made payable to the Sarnia Section, Instrument Society of America and sent to the Treasurer, Mr. R. Asselstine, 891 Burr Street, Sarnia, Ontario.

Correspondence concerning programs should be sent to the Program Chairman, Mr. H. Kohlmeier, 352 Stuart Street, Sarnia, Ontario.

Copy for "THE BULLETIN" should be sent to the Managing Editor, Mr. L. J. Hall, 730 Talford Street, Sarnia, Ontario.

COMPANY REPRESENTATIVES FOR 1954-55

Imperial Oil Limited	Joe Woodcock
Polymer Corporation	Tony Plazek
Canadian Oil Refineries	Fred Croft
Dow Chemical Company	Jack Almey
Sun Oil Co. Limited	Jack Warwick

COMMITTEE CHAIRMEN FOR 1954-55

NATIONAL DIRECTOR	EMPLOYMENT	HOUSE
J. W. Graeb	Larry Hall	Tony Plazek
PROGRAMS	MEMBERSHIP	PUBLICITY
H. Kohlmeier	Joe Woodcock	Larry Hall
EDUCATION	FILMS	SPECIAL EVENTS
Fred Croft	Len Carter	Warren McKay

MANAGING EDITOR "BULLETIN"
Larry Hall

We are pleased to patronize the Sarnia Section Journal

PROCESS-INSTRUMENT SYSTEMS LIMITED

BOX 331 RICHMOND HILL (TORONTO) ONTARIO
LLOYDBROOK - 6863

- Continental Butterfly Control Valves
- Limitorque Valve Operators
- Askania Hydraulic Controls — Heavy Duty Applications
- Bendix Viscosity Control
- Instruments Inc. Capacitance & Radioactive Level Control
- Instrof Instrument Tubing Support
- Dekoron Instrument Tubing & Fittings
- Scam Annunciators
- Kendall Air Pressure Regulators
- Kates Flow Regulators
- Atkomatic Pilot Operated Solenoid Valves

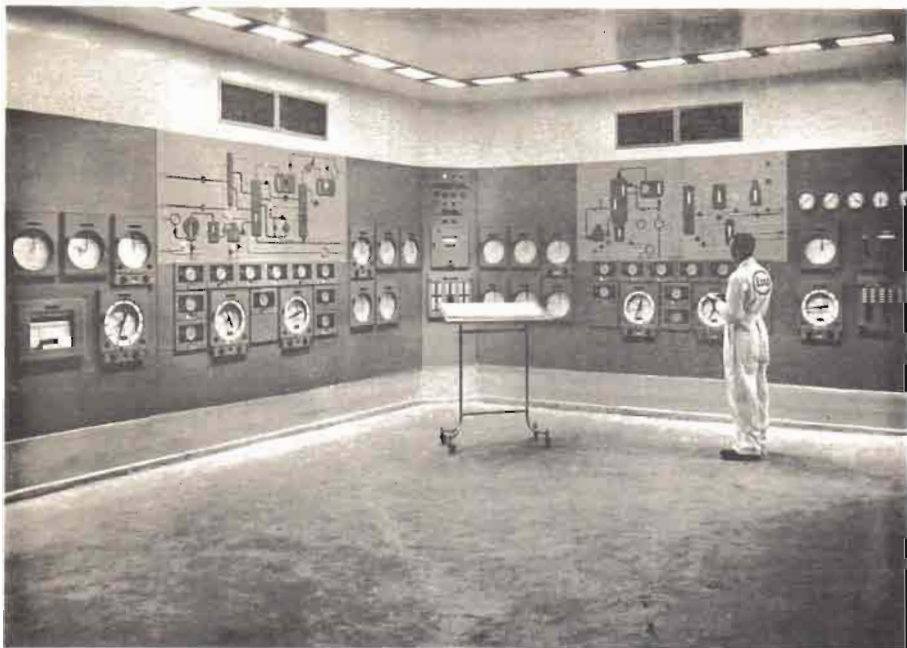


Photo — Courtesy of Imperial Oil Limited

Here's How Honeywell Customized Instrumentation Helps an Oil Refinery

Honeywell Customized Instrumentation supplied this modern refinery with a "Nerve Centre", a centrally located ColorGrafic panel (illustrated) where all processing operations are accurately portrayed and controlled

Maybe your production processes are not as complex as those of an oil refinery. But, whether simple or complex, whether your processing includes Ph, conductivity, flow, pressure, humidity, liquid-level, specific gravity, or any combination of these or other factors . . . Honeywell Customized Instrumentation will provide the exact records and controls you require.

The net result adds up to lower cost operation . . . through more efficient use of men and machines, an important step toward practical realization of the automatic factory.

You can get specific information of particular benefit to your plant at your local Honeywell office. Or write Dept. ISS . . . Honeywell, Leaside, Toronto 17.



MINNEAPOLIS
Honeywell
BROWN INSTRUMENTS

First in Controls



Rectangular Case Recorder



M/42 Pneumatic Transmitter



Differential Pressure (d/p) Cell

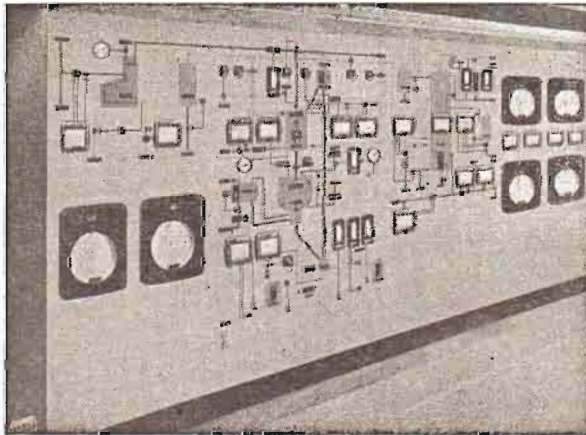


M/40 Recording Controller

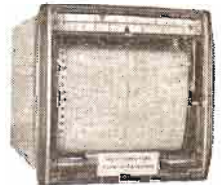
PROCESS MEASUREMENT AND CONTROL

Complete process measurement and control instrumentation covering such variables as temperature, pressure, flow, liquid level, humidity, pH, conductivity, density, dew point, viscosity, force, speed, position, etc. etc. Instrument designs to suit conventional or graphic type panels — controllers for board or local mounting.

This complete line of Canadian made Foxboro instruments, combined with the wide application knowledge and engineering experience of Peacock Brothers Limited, guarantees the best instrumentation for almost any process.



M/52 Consotrol Indicating Controller



M/53 Consotrol Recording Station



M/58 Consotrol Controller



M/59 Consotrol Valve Mounted Controller



PEACOCK BROTHERS LIMITED

Montreal

Sydney Toronto Sudbury Winnipeg Calgary Vancouver

The "BULLETIN"

VOLUME 4 No. 7

March 1955

Managing Editor: Larry Hall

Illustrator: N. Knowles

"Written on a Roll Chart": H. Hobbs

Polymer Reporter: Tony Plazek

I.O.L. Reporter: Joe Woodcock

Canadian Oil Reporter: Fred Croft

Dow Reporter: John Almey

THE FEBRUARY MEETING

Something different in the way of ISA meetings was the February meeting of the Sarnia Section at the "Y" on Monday, February 28. Mr. Carl Ritter, Development Engineer of the Taylor Instrument Companies, of Rochester, N.Y., outlined some of his experience in starting up a new oil refinery in Saudi Arabia.

The talk was in the nature of a Travelogue and was profusely illustrated with colored slides which Mr. Ritter took himself. These were arranged in the order of the trip, starting out with Idlewild airport in New York, continuing with views from the air on the way, with stops in Ireland, Paris and Italy.

The description of the customs of the natives in Saudi, Arabia was most interesting and also quite amusing. A picture of the control panel in one of the units showed little piles of sand on the fronts of some of the controllers. The speaker explained that an elaborate air conditioning system to keep the control room clean and cool was entirely ignored by the natives who turned off the fan and threw both

doors wide open so that the full sweep of the hot, dusty desert wind was felt. This had the effect of sandblasting the paint off the brand new panelboard as well as making it most difficult to keep the delicate instruments operating effectively.

Naturally, this sort of operating procedure proves wasteful but the Arabian desert seems to cover an almost limitless supply of oil and gas and it appears as if waste can actually be afforded. Vast quantities of gas are burned off in flares which can be seen 70 miles away at night and this gas is even used to run turbines on its way to the flare because of its high pressure. The oil comes out of the ground at about 1500 psi and does not have to be pumped to the refinery. Instead it is passed through a series of vessels where the pressure is reduced stepwise to the point where fractionation can be started.

Water is, of course, the scarcest commodity, and is brought up from 700 foot deep wells for utility uses but not for drinking. Drinking water is all distilled. Mr. Ritter showed

slides of swimming pools built for the oil employees — the American ones, that is—and explained that in one the water was actually cooled by refrigeration to the point where it was bearable. Otherwise the water temperature often rose to 95 degrees or even more.

Our president, Jack Heatley, joined in the following discussion period and told of some of his amusing experiences while he was in the same country in 1940. At that time the going was rougher for the westerners than it is at the present. His description of the 1940 Arabia contrasted quite sharply with the 1954 version and showed how things are improving far everyone. Jack said that when he was there, it was necessary to run the refinery only at night because the heat of the day turned normally light hydrocarbon liquids to gases. He told of an incident where his crude to the unit kept

shutting down. Upon investigation, it was found that the shut-off valves had been mysteriously closed. This happened several times until the culprit was caught. It seems that the native was going to school and had been taught how to open and close a valve. Proud of his newly found knowledge, he kept demonstrating this to his friends on the way to work by closing the crude line valves and leaving them closed. Jack didn't say, but it appeared that the student hadn't learned lesson number two—how to open a valve.

The speaker was thanked by Fred Croft and refreshments were served during which the stories went on. While the meeting wasn't a typical one, it was a refreshing change and was enjoyed by most of the members there.

P.S. See Howard Hobbs interpretation in rhyme in "Written on a Roll Chart".

NOMINATING COMMITTEE

A Nominating Committee was appointed at the February meeting by President Jack Heatley. They are to prepare a slate of nominees from which the general membership of the Sarnia Section will select by ballot their choice of executive officers to head up the activities for next year. This election will take place at the April meeting and the new officers will be installed into office at the annual

meeting in May by the Honourary President. The nominating committee consists of chairman, AMBY UPFOLD, and RON CHAMBERLAIN and LIONEL WILLIAMS. All of these members are past presidents of the section and know the capabilities of the members quite well. So, if you are approached by one of these gentlemen as a prospective nominee, please give their proposition your fullest considera-

tion. It is not only a duty but a rewarding experience for every member to take a turn on the executive of the ISA. You don't have to leave the possible selection of officers to the nominating committee either. At the March meeting, you have the right and the

privilege of nominating any active member to the slate. So, think over the members who you would personally like to see in office and submit your nomination to either the committee or to the meeting in March.

COMMENT

In a recent cartoon strip, a couple of kids are shown standing outside of one of those "Revival Theatres" where the old silent movies are shown for the benefit of nostalgic old-time movie fans. "Look!" one shouts to the other—the latest thing, movies without sound!" The Sarnia Section showed this latest phenomenon at the February meeting when a full color movie with sound was shown without sound. Better luck, next time, LEN.

WARREN McKAY has submitted his resignation as Chairman of Special Events for the rest of the year. His recent election to the presidency of the Sarnia Minor Athletic Association is taking up most of his spare time. His work was divided up amongst the executive until the new chairman takes over.

While showing a slide of a camel in the Arabian desert at the February meeting, CARL RITTER explained that the odd little bits of dried out scrubby desert plants were all that the camel had to eat.

"We found these camels are ill-tempered creatures", he added. From behind me came the voice of HARRY WILTON: "You would be mad too if that's all you had to eat!"

Members are assured of adding to their store of instrument know how by attending the March meeting of the Sarnia Section the last Monday of this month at the "Y". Bailey Meter Company's C. H. Barnard is going to discuss transmission systems and in line with the growing trend toward electronic transmission will compare these with pneumatic systems in use at present in most process industries. The wave of contagious illnesses in the Sarnia area which cut down on our attendance at the February meeting is about over and we can expect a big turnout. Let's make this a good meeting all around. You don't have to be a member to attend this meeting (or any meeting) so come yourself and bring another instrument friend or anyone else interested.

Notice to Advertisers

APPLICATIONS FOR ADVERTISEMENTS IN THE SARNIA SECTION "BULLETIN" FOR NEXT YEAR ARE NOW BEING RECEIVED. THREE NEW COMPANIES HAVE ALREADY APPLIED. FIRST CHOICE WILL BE GIVEN TO PRESENT ADVERTISERS SO, IF YOU ARE ONE SEND YOUR RESERVATION IN NOW. JUNE FIRST IS THE DEADLINE FOR COPY. RATES

WILL BE APPROXIMATELY THE SAME. LOOK FOR A FURTHER ANNOUNCEMENT INCLUDING RATES IN THE APRIL ISSUE OF THE "BULLETIN".

Address:

Mr. L. J. Hall, Managing Editor
The "Bulletin",
730 Talfourd Street
Sarnia, Ontario.

MEETING NOTICE

- PLACE: Sarnia "Y"
Clubrooms "A - B"
- DATE: Monday, March 28, 1955.
- TIME: 8.00 P.M.
- SPEAKER: **MR. C. H. BARNARD**
Staff Engineer i/c Products Application
Bailey Meter Company
Cleveland, Ohio
- SUBJECT: **"TRANSMISSION SYSTEMS FOR INDUSTRIAL INSTRUMENTS"**

VISITORS WELCOME — REFRESHMENTS

WRITTEN ON A ROLL CHART

Baksheesh!

Come, my children, let us go,
 Magic carpet waits below.
 Climb aboard here, take my hand,
 We'll pass great leagues of sea and land,
 Of farm and forest, hill and crop,
 And many a craggy mountain-top.
 Across the late IL Duce's sea
 To lands of ancient history.
 To lands long favoured by the scribes
 Where dwell, I'm told, nomadic tribes,
 "Nomadic" meaning "not content",
 (They'd rather move than pay the rent.)
 And we should scarcely blame them for it,
 The whole darn place is rather horrid,
 Their outlook opposite to grand,
 With mile on mile of drifting sand.
 And naught but rags to shield their heads,
 They prowl the sun-baked gravel beds.
 And even the sea is boiling-hot.
 Yes, drink their water, I'd rather not.)
 They live in tents sans tap or drain
 While noon-day sun sautee's the brain
 And lest they feel better than Job or Lear
 ALLAH forbids the use of beer.
 How can we blame them when they scream
 This fearsome cry "Chee kar-kardeen!"
 Or even when they rasp and pant,
 Muttering this dismal chant,—
 "Yeki bood,
 Yeki nabood,
 Pish az Allah,
 Hish kay nabood".

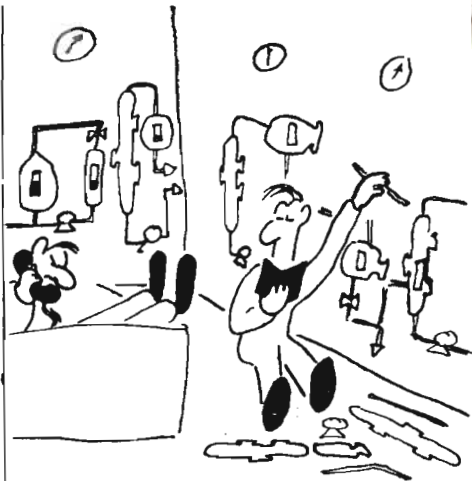
Come, mes enfants, let us hasten
 Out to an Arab pumping station
 Thru torrid wastes we make good speed,
 Where camels feed on dried-out weed,

Looking out of jaundiced eye
 They spit on careless passer-by.
 Hospitably the door is wide,
 Letting us, and sand, inside
 Where Tri-Acts clustered here and there,
 Gamely gasp the gritty air.
 Panting, choking, hoarse and loud.
 Like an asthma-ridden crowd.
 Far, far worse than away back where
 Thru verdant banks flows blue St. Clair
 Now greet the Operator-Chief,
 (Late an unrepentant thief)
 But now an Emir in his tent.
 Master of this settlement.
 Ruler of a hundred lives,
 (Legally he has four wives.)
 I sympathize with him because,
 Legally, four mother-in-laws.
 Also, hordes of kith and kin
 Swarm around and live on him,
 Swarm around and tend their stock,
 A noisy, squabbling, ordorous flock,
 Who never have and never will,
 Overdo the chlorophyll.
 Chasing nimble, maiden goat,
 What sound comes from the shepherd's throat?
 What awful wail both fierce and tender,
 Blends with bleat of sweet surrender?
 What din now dominates the scene
 This fearsome cry—"Chee kar-kardeen!"
 And presently they rasp and pant,
 Muttering this dismal chant,—
 "Yeki bood,
 Yeki nabood,
 Pish az Allah,
 Hish kay nabood".
 Enough of this fantastic pace
 Let us recover here at base
 In air-conditioned traveller's club

Where gungah-wallahs haunt the tub.
Where many a copper coil and pot
Distills the fragrant apricot.
It's golden nectar forms, I guess,
A river of forgetfulness,
Where those embarking, in a dream,
 May hear again, "Chee kar-kardeen!"
 And as they drift may rasp and pant
Muttering this dismal chant,—
 "Yeki bood,
 Yeki nabood,
 Pish az Allah,
 Hish kay nabood".

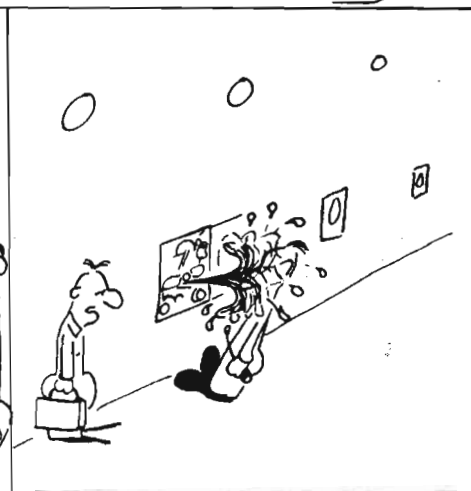
—H. Hobbs.

P.S. Many thanks to Mr. Carl Ritter of Taylor Instrument Co. for the entertaining travelogue at our February meeting on which the foregoing was in part, based.



WHAT DO YOU MEAN LAZY, JUST SHOW ME TWO OTHER MEN WHO CAN REMOVE TWO TOWERS, THREE DRUMS, AND AN ASSORTMENT OF FLOW LINES IN SEVEN HOURS.

WHEN I SUGGESTED THAT THE MEN MAKE OUT THEIR OWN AND OUR EVALUATION REPORTS I NEVER THOUGHT THIS WOULD HAPPEN.

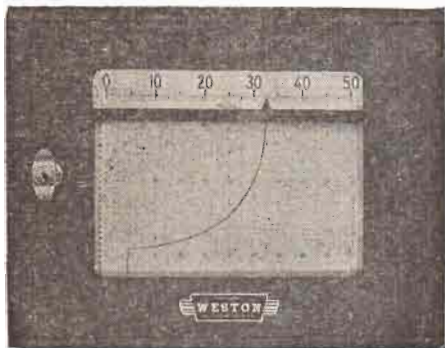


WHAT MAKES YOU THINK HE'S LISTENING IN ON OUR CONVERSATION?

NO! NOT ANOTHER WATER LEAK IN THE AIR DRYERS

It Will Pay You to Make **POWERLITE** Your **INSTRUMENT HEADQUARTERS**

It's always more economical and satisfactory to deal with **ONE** broadly experienced and responsible source of supply. Instruments illustrated are but a few from our wide range. Tell us your instrument problems.



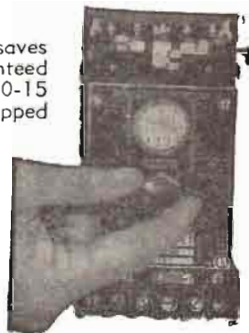
POTENTIOMETERS

The new High-speed Recording Potentiometer by Weston sets a new pattern for sound, simplified design . . . for simplicity and economy of maintenance . . . for sustained high accuracy and sensitivity. Here are a few of its many outstanding features:

- Chart Installation is simpler
- Chart Speed Changes are simpler
- Changing Ranges is simpler
- Pen and Carriage are simpler
- All Maintenance is simpler

A. T. C. TIMERS

Vernier-Set Timer: Simplifies wiring circuits and saves vital space. This model is extremely accurate, guaranteed .005 of dial range. It has a twelve dial range from 0-15 sec. to 0.60 hr. Contacts carry 25 amp. loads. Equipped with Telechron Motor.



INDUSTRIAL THERMOMETERS

ALL-METAL

—provide unmatched readability and durability — accuracy within 1% of thermometer range. Available in all types, ranges and stem length (2½" to 72") for all requirements.

GLASS (Metal Case)

—available in all forms, all ranges, stem lengths and connections. Accuracy within one scale division. Also submarine types, metal and cupcase thermometers.

5422

POWERLITE DEVICES LIMITED

MONTREAL

TORONTO

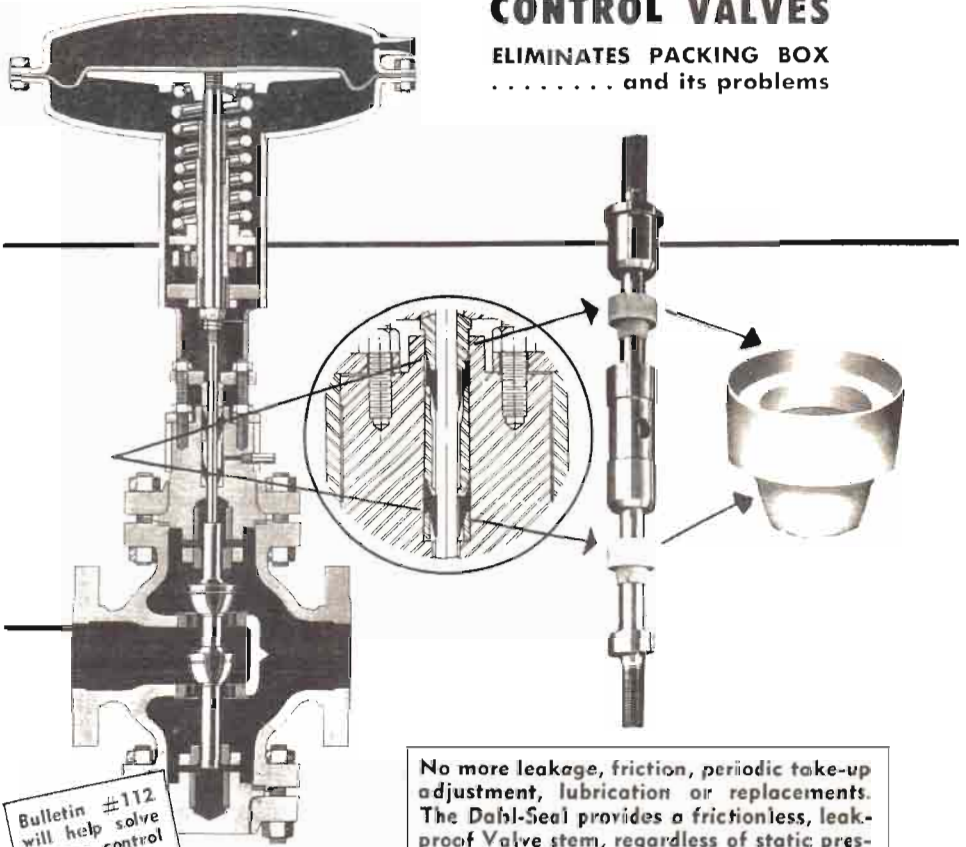
VANCOUVER

Representatives at: **HALIFAX WINNIPEG REGINA CALGARY EDMONTON**

"Dahl-Seal"®*

AVAILABLE ONLY IN **HAMMEL-DAHL
CONTROL VALVES**

ELIMINATES PACKING BOX
..... and its problems



Bulletin #112
will help solve
process control
problems
**WRITE FOR
YOURS TODAY**

No more leakage, friction, periodic take-up adjustment, lubrication or replacements. The Dahl-Seal provides a frictionless, leak-proof Valve stem, regardless of static pressure in system.

Manufactured in CANADA by
GUELPH ENGINEERING COMPANY, LTD.
460 YORK ROAD · GUELPH, ONTARIO

for modern ways to handle
old problems, specify Fischer & Porter
instrumentation for the



measurement and control of these variables...

CONSISTENCY • DENSITY • DIFFERENTIAL PRESSURE • FLOW
HUMIDITY • LIQUID LEVEL • MOTION • OPERATION TIME
POSITION • PRESSURE • SPECIFIC GRAVITY • TEMPERATURE
VACUUM • • • VISCOSITY • • • WEIGHT

plus... CHLORINATION • FLOW METER CALIBRATION STANDS • SPECIAL PROPORTIONING SYSTEMS
STANDARD, GRAPHIC AND SEMI-GRAPHIC PANELS

Write for full information.



complete process instrumentation

FISCHER & PORTER (CAN.) LTD.

BEVERLEY HILLS P.O. - TORONTO

Company owned sales and service branches strategically located throughout the world.



AUTOMATIC CONTROL EQUIPMENT

INSTRUMENTS FOR RECORDING & CONTROLLING

Liquid Level — Flow — Pressure — Temperature

TRANSMITTERS — RECEIVERS

DIAPHRAGM-OPERATED CONTROL VALVES

PRESSURE REDUCING REGULATORS

BACK PRESSURE REGULATORS

PUMP DISCHARGE PRESSURE REGULATORS

STEAM PUMP SPEED GOVERNORS

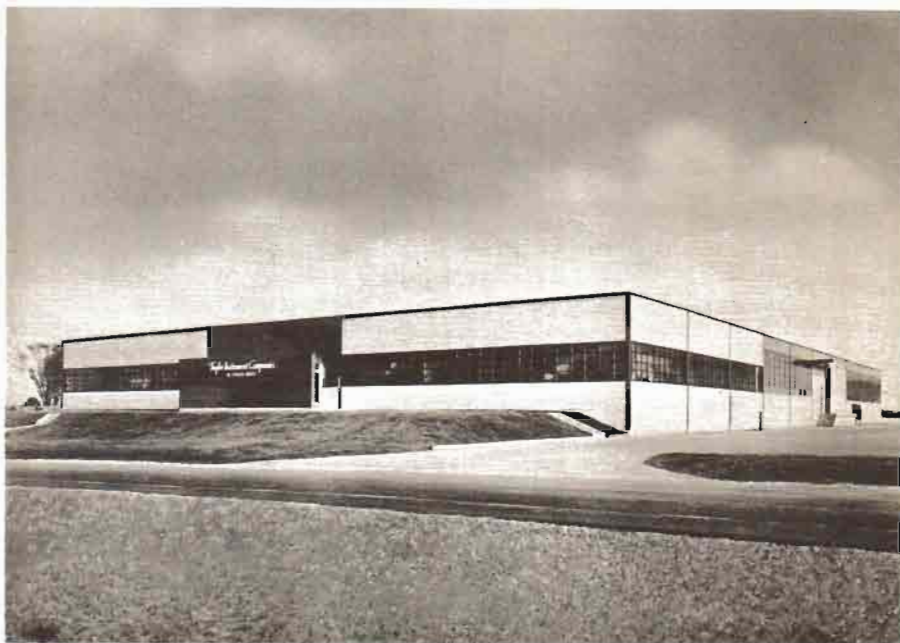
MASON-NEILAN REGULATOR CO. Ltd.

Head Office and Plant
5415 PARE ST., MONTREAL

Branch Sales Office
2842 BLOOR ST. W., TORONTO
Phone ROdney 2429

Representatives of
VANCOUVER — CALGARY — EDMONTON — WINNIPEG

A Cordial Invitation



... is extended to all members of the Sarnia Section of I.S.A. and their friends to visit and inspect the new modern plant of Taylor Instrument Companies of Canada Ltd., 75 Tycos Drive, Toronto.

Forty years of service to Canadian Industry has enabled us to understand Chemical and Oil Refinery requirements. The increased facilities afforded by the new plant continue to be at your service.

For additional information concerning our line, consult your Taylor Field Engineer, or write Taylor Instrument Companies of Canada Ltd., P. O. Box 87, Station D, Toronto.

TAYLOR INSTRUMENTS MEAN ACCURACY FIRST

We have the pleasure of serving industry in the Sarnia Area as exclusive representatives of the following manufacturers of quality instruments, Controls and Accessories:—

FISHER GOVERNOR COMPANY

—Pressure and Level Controllers

INDUSTROL CORPORATION

—Dehumidifiers

**MANNING, MAXWELL & MOORE,
OF CANADA LIMITED**

—Ashcroft Gauges

—Hancock Valves

—American Industrial Thermometers

—Consolidated Safety and Relief Valves

—Ashcroft and Microsen Transmission
Systems

TRINITY EQUIPMENT CORPORATION

—Thermowells

G. W. Beecroft Company Limited

254 Merton Street
TORONTO 7, ONT.