

Tub and Shower Combination

Used in the finest modern bathrooms where the luxury and comfort of real automatic temperature control of the water for shower and tub are desired.

With the arrangements shown here, the bather can adjust the mixer and have it delivering water at the right temperature before he steps into the tub or shower.

Left, Figure 76-440
One shut-off valve and volume control and a special diverting spout.

Right, Figure 77-440
Two shut-off valves and volume controls, one for the tub and the other for the shower.

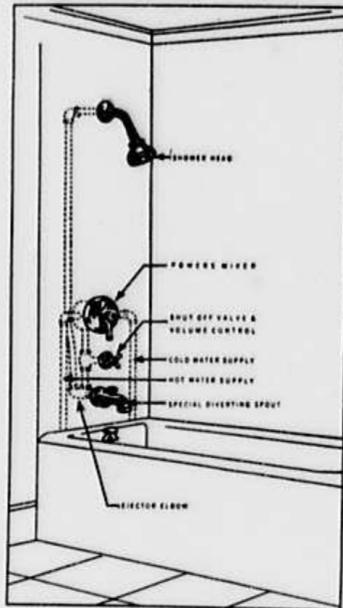


Figure 76-440

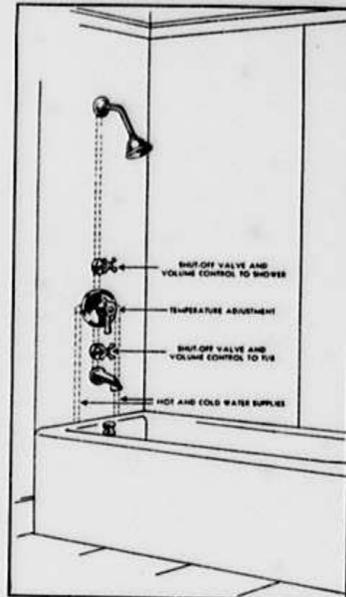


Figure 77-440

Powers Style T-E Knee-Operated Thermostatic Mixer for Surgeons' Wash-Up Sinks

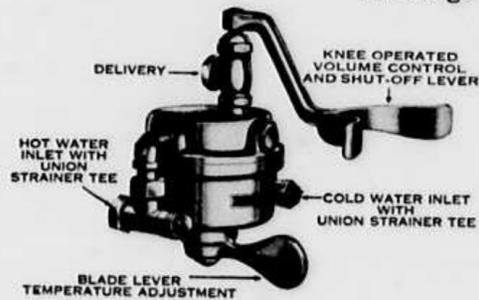


Figure 78-440

The Style T-E Knee-Operated Thermostatic Mixer is designed to mix hot and cold water and deliver a supply of warm water for surgeons' and dentists' wash-up purposes or for the washing of surgical specimens. The delivery temperature remains constant regardless of pressure or temperature fluctuations in the supply lines.

List Prices—See Items 13 and 14 in price list on page 16.

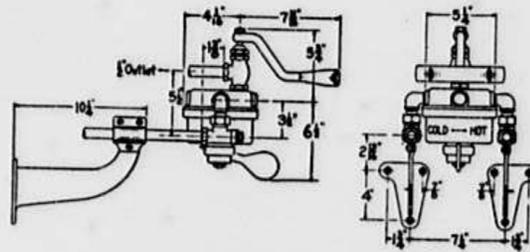
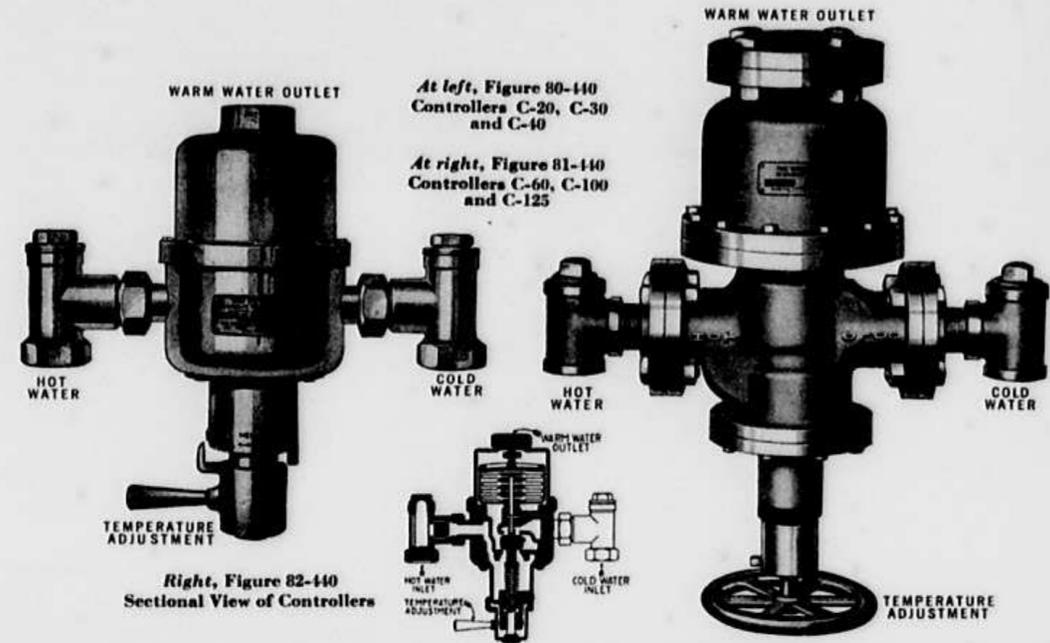


Figure 79-440

It is made in the 1/2-inch size only, with knee or elbow operated volume control shut-off valve and blade type temperature adjustment, and is furnished complete with union strainer tees. It can be supplied in rough bronze and in polished chromium plated finish. Brackets are optional and are supplied in the same finishes as the mixer.

Powers Thermostatic Water Controllers Exposed Type



At left, Figure 80-440
Controllers C-20, C-30
and C-40

At right, Figure 81-440
Controllers C-60, C-100
and C-125

Right, Figure 82-440
Sectional View of Controllers

This controller is designed for exposed installation, to control thermostatically the mixing of hot and cold water and to deliver a mixture at any temperature desired within the range of the controller. Controllers for concealed installation are shown on page 22.

Because of its rugged construction and dependable operation, this controller is used widely on group or gang shower baths, progressive or zone showers, hospital hydrotherapy, wash sinks and wash fountains, automobile and truck washing, industrial processes, etc.

Safety Features—The temperature of the water delivered by this controller will not vary due to changes of temperature in the hot water supplied to the controller. Neither will reasonable changes of pressure affect it. (If pressure changes are extreme, a pressure equalizer is recommended; see paragraph headed *Water Pressure* for details.)

In case of a failure of either the hot or cold water supply, the controller will shut off the delivery, a dry

shut-off on the hot side being assured by the use of a composition disc.

Temperature Range and Adjustment—Standard range is from cold water temperature to 115° F., but for hot water line control a range of 100° to 140° F. can be supplied.

Controllers C-20, C-30 and C-40 have lever adjustment, but knurled wheel adjustment will be substituted if desired. Controllers C-60, C-100 and C-125 have wheel adjustment. Removable key adjustment lock can be supplied at extra cost for any size controller.



Figure 83-440
Removable Key
Adjustment Lock



Figure 81-440
Knurled Wheel
Adjustment

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Construction—Controllers C-20, C-30 and C-40 are made of bronze with polished chromium plated finish. C-60, C-100 and C-125 are also of bronze chromium plated, but polished only on machined parts. Controllers can also be furnished in rough bronze. Controller C-125 can be had in iron body construction with bronze inner parts and aluminum paint finish.

Check Valves and Strainers—All controllers have hot and cold water check valves and strainer tees with removable filter screens of very large capacity.

Piping Connections—Controllers are built standard for upward discharge, but will be furnished for downward discharge when so specified.

Strainer tees are arranged for supply lines coming up from the floor, but may very easily be rotated to accommodate piping coming from above or from the wall.

Wall Support can be furnished when specified (see Item 10 in price list below, and roughing-in dimensions on page 21).

Water Pressure—Hot and cold water should always come from the same original source or at least be under approximately the same pressure. For best results this pressure should not be over 60 pounds and never over 100 pounds. Pressure reducing valves should be used if necessary (see Bulletin No. 256).

If either supply pressure fluctuates more than 50% above or below the normal operating pressure, Controllers C-20, C-30 and C-40 should be ordered equipped with a built-in equalizer (see Item 11 in price list). As Controllers C-60, C-100 and C-125 are not made with built-in equalizers, a Powers special composition diaphragm pressure equalizer should be used (see page 21, and Item 12 in price list below). Powers pressure

equalizers are also available for use with standard Controllers C-20, C-30 and C-40; information and prices upon application.

Pressure equalizers for controllers C-60, C-100 and C-125 are furnished in aluminum paint finish only. They have brass body single seat valves, an iron housing, and a special composition equalizing diaphragm. Equalizers should be installed in a horizontal position and may be placed alongside, in back of, or directly over or under the controller, behind the wall, or a reasonable distance from the controller.

Capacities shown in the table below are based on 45 pounds hot and cold water pressure and 100° delivery temperature. Complete capacity data will be found on page 36.

How to Order—State proposed use and specify:

- (A) Controller size.
- (B) Exposed or concealed type controller. If concealed, specify horizontal or vertical mounting, and thickness of panel or table top (maximum two inches).
- (C) Finish: Rough bronze, chromium plated, or iron body (C-125 only).
- (D) Upward (standard) or downward discharge.
- (E) Any special features required.
- (F) Maximum temperature required.
- (G) Minimum and maximum delivery volume.
- (H) Pressures of hot and cold water.
- (I) Temperature of hot water.

Unless otherwise specified, an exposed type chromium plated controller with upward discharge and set for a maximum delivery temperature of 115° F. will be furnished.

LIST PRICES, Capacities, and Shipping Weights

Item	Controller Identification		Construction	Capacities (45 lbs. Pressure)		Connections		List Prices—Exposed Type			Shipping Weight, Lbs.
	New	(Old)		No. of Shower Heads	Gallons Per Minute	Inlet	Outlet	Rough Bronze	Chromium Plated	Aluminum Paint Finish	
1	C-20	(1)	Bronze Body	1 to 4	22	1/2"	3/4"	\$113.50	\$125.00	.....	35
2	C-30	(3)	Bronze Body	4 to 6	34	3/4"	1"	\$131.75	\$143.00	.....	40
3	C-40	(4)	Bronze Body	6 to 10	53	1"	1 1/4"	\$176.00	\$187.25	.....	45
4	C-60	.....	Bronze Body	10 to 14	67	1 1/4"	1 1/2"	\$187.00	\$200.00	.....	100
5	C-100	(5)	Bronze Body	14 to 20	100	1 1/2"	1 3/4"	\$198.50	\$212.25	.....	100
6	C-125	(6)	Bronze Body	20 to 25	125	1 3/4"	2"	\$268.00	\$281.50	.....	105
8	For concealed type controller: C-20, C-30 and C-40 add \$10.00 list; C-60, C-100 and C-125 add \$15.50 list.										
9	For removable key adjustment lock for Controllers C-20, C-30 and C-40 add \$10.00 list; for C-60, C-100 and C-125 add \$15.50 list.										
10	For wall support for Controllers C-20, C-30 and C-40 add \$12.50 list; for C-60, C-100 and C-125 add \$18.75 list.										
11	For built-in equalizer controller: C-20, add \$25.00 list; C-30, add \$31.00 list; C-40, add \$37.50 list.										
12	Composition diaphragm pressure equalizer for Controller C-60 and C-100, add \$81.00 list; for C-125, add \$100.00 list.										

Roughing-In Dimensions for Exposed Type Controllers

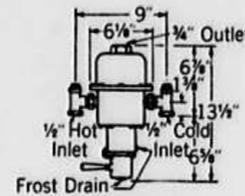


Figure 85-440 Controller C-20

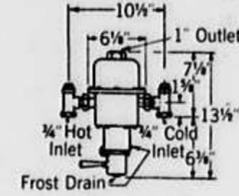


Figure 86-440 Controller C-30

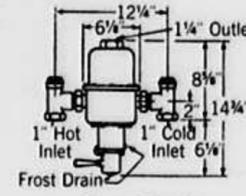


Figure 87-440 Controller C-40

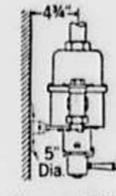


Figure 88-440 Wall Support for Controllers C-20, C-30 and C-40

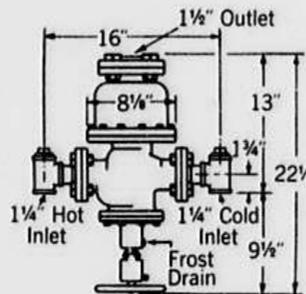


Figure 89-440 Controllers C-60 and C-100

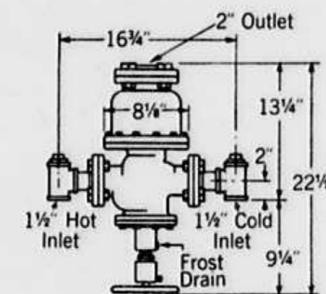


Figure 90-440 Controller C-125

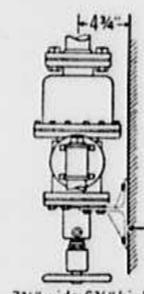


Figure 91-440 Wall Support for Controllers C-60, C-100 and C-125

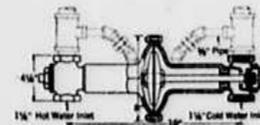


Figure 92-440 Pressure Equalizer for Controllers C-60 and C-100

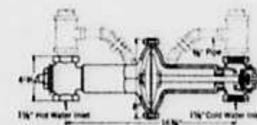


Figure 93-440 Pressure Equalizer for Controller C-125

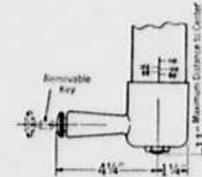


Figure 94-440 Removable Key Adjustment Lock

NOTE: The pressure equalizers shown above can also be furnished with balanced valves; prices on application.

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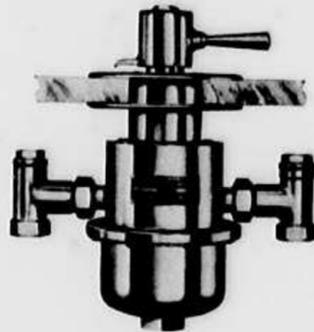
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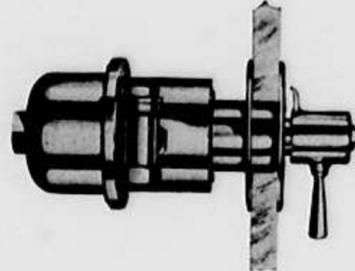
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Powers Thermostatic Water Controllers
Concealed Type



Left, Figure 95-440
 Controllers C-20, C-30
 and C-40 for
 Vertical Installation



Right, Figure 96-440
 Controllers C-20, C-30
 and C-40 for
 Horizontal Installation

This controller is designed for concealed installation, the body of the controller and all piping being behind the panel with only the dial and handle exposed to view. It may be mounted either in a horizontal or vertical position, and the inlets may be turned to meet individual piping requirements. The controller and piping should be supported rigidly to eliminate any strain on the dial.

Construction details of the concealed type controller are the same as the exposed type controller (page 19) except for the dial and handle. Roughing-in dimensions are given on page 23.

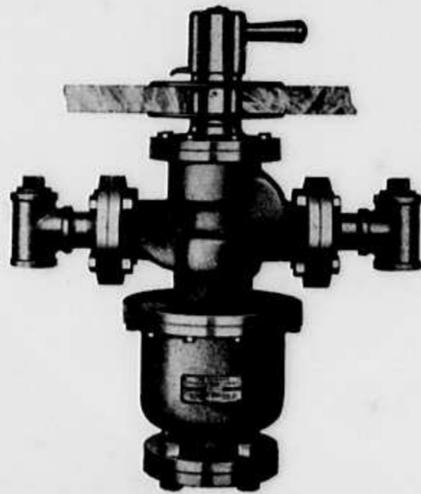
Dial and Handle for concealed type controllers are

shown on page 23. Octagonal dial and handle can be furnished on special order.

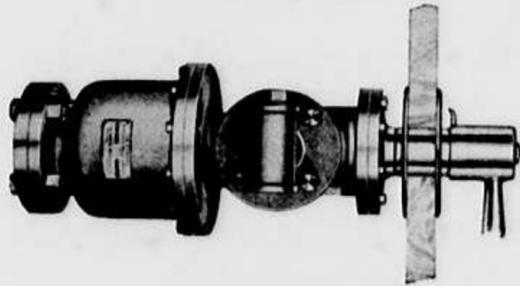
Finish—Standard finish for the dial and handle is polished chromium plate, but special finishes can be provided. The controller body is rough bronze (standard for concealed installation), but may be chromium plated if desired.

How to Order—Give all information called for under *How to Order* on page 20.

List Prices—See price list on page 20, noting in particular Item 8.



Left, Figure 97-440
 Controllers C-60, C-100 and C-125
 for Vertical Installation



Above, Figure 98-440
 Controllers C-60, C-100 and C-125
 for Horizontal Installation

Roughing-In Dimensions
for Concealed Type Controllers

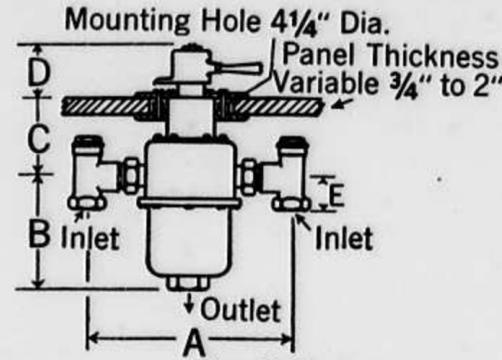


Figure 99-440
 Controllers C-20, C-30 and C-40—Vertical Mounting

PRINCIPAL DIMENSIONS

Size	Inlet	Outlet	A	B	C	D	E
C-20	3/2	3/4	9	5 1/2	5	3 3/8	1 3/8
C-30	3/4	1	10 1/2	5 1/2	5	3 3/8	1 3/8
C-40	1	1 1/4	12 1/4	6 3/8	5	3 3/8	2
C-60	1 1/4	1 1/2	16	11 1/4	7	4	1 3/4
C-100	1 3/4	1 1/2	16	11 1/4	7	4	1 3/4
C-125	1 1/2	2	16 3/4	11 1/4	7	4	2

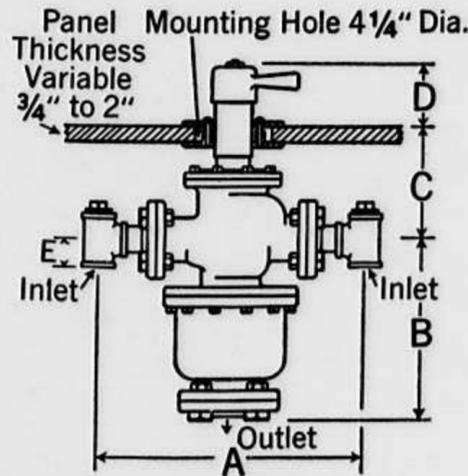


Figure 102-440
 Controllers C-60, C-100 and C-125—
 Vertical Mounting

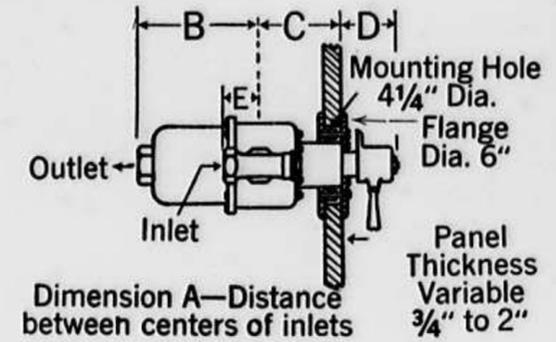


Figure 100-440
 Controllers C-20, C-30 and C-40—Horizontal Mounting

Right, Figure 101-440
 Dial and Handle for
 Concealed Type Controllers

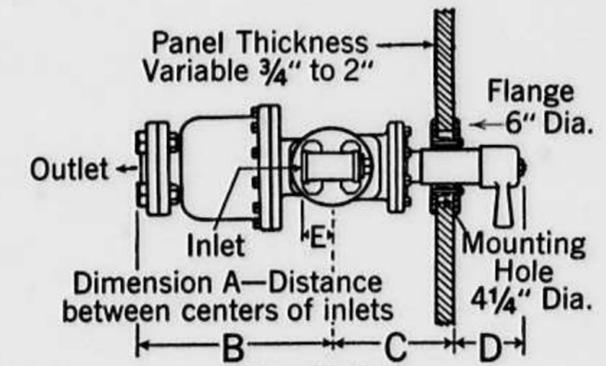


Figure 103-440
 Controllers C-60, C-100 and C-125—
 Horizontal Mounting

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**Powers Thermostatic Water Controllers
Installed in Cabinets**

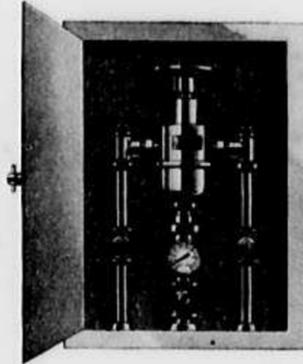
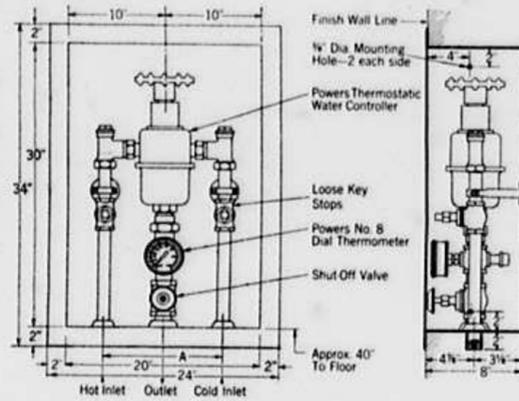


Figure 104-440

Left, Figure 104-440 and Right, Figure 105-440 Thermostatic Water Controller C-20, C-30 or C-40 Installed in Cabinet with Supplies from Below and Downward Delivery



PRINCIPAL DIMENSIONS

Size	Inlet	Outlet	A
C-20	1/2"	3/4"	9"
C-30	3/4"	1"	10 1/2"
C-40	1"	1 1/4"	12 1/4"
C-60	1 1/4"	1 1/2"	16"
C-100	1 3/4"	1 3/2"	16"
C-125	1 1/2"	2"	16 3/4"

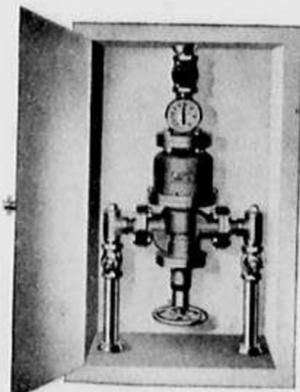
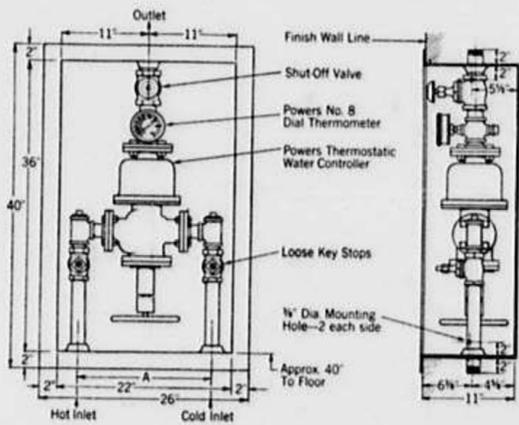


Figure 106-440

Left, Figure 106-440 and Right, Figure 107-440 Thermostatic Water Controller C-60, C-100 or C-125 Installed in Cabinet with Supplies from Below and Upward Delivery



**Powers Thermostatic Water Controllers
For Control Table Installation**

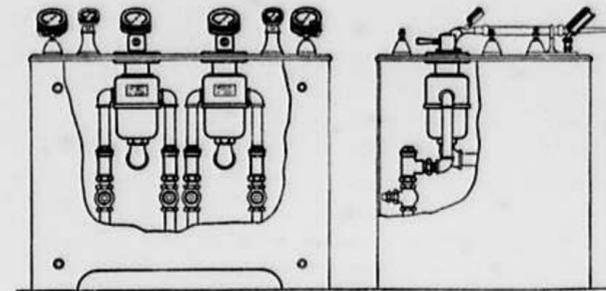


Figure 108-440 Concealed Type Control Table Showing Piping Arrangement

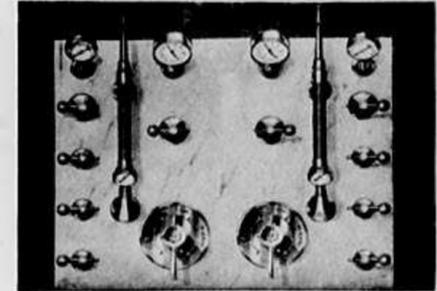


Figure 109-440 Top View of Concealed Type Control Table

Powers exposed and concealed type thermostatic water controllers are used very widely to regulate the temperature of water for hydrotherapeutic showers and related treatments.

The control tables above and at the right employ concealed type controllers. Where space must be conserved in an installation of this kind, the union check valve strainer tees may be removed from the controller and placed in the hot and cold water lines as shown in the piping arrangement above.

The two illustrations at the bottom of the page show control units with all exposed piping. Exposed type thermostatic water controllers are used in this kind of installation.

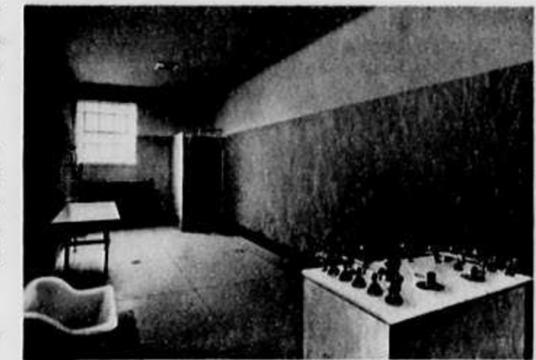
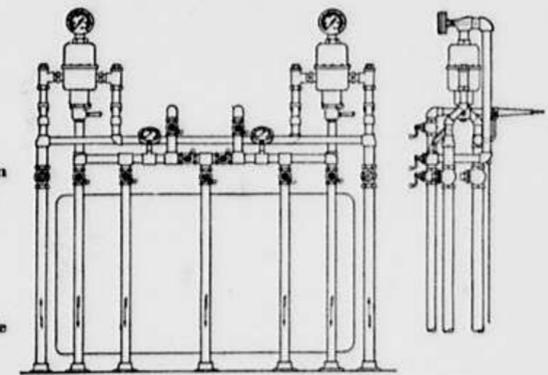


Figure 110-440 Needle Bath at Elgin State Hospital, Elgin, Illinois



Left, Figure 111-440 Scotch Douche Installation at the County Hospital, Wauwatosa, Wisconsin

Right, Figure 112-440 Exposed Type Control Table



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Typical Shower and Washroom Installations

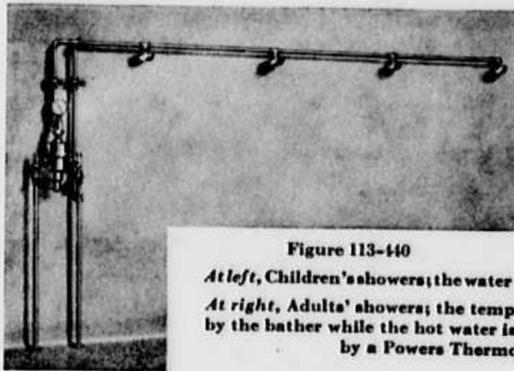


Figure 113-440
At left, Children's showers; the water temperature is adjusted by an attendant.
At right, Adults' showers; the temperature of each shower may be adjusted by the bather while the hot water is kept at a safe maximum temperature by a Powers Thermostatic Water Controller.

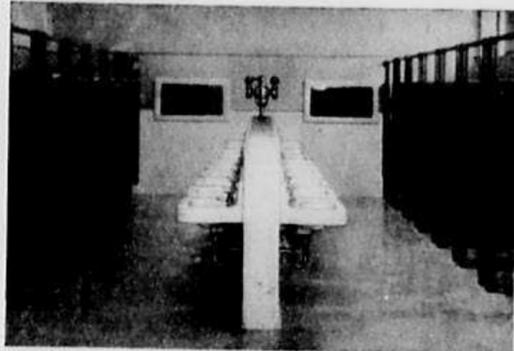
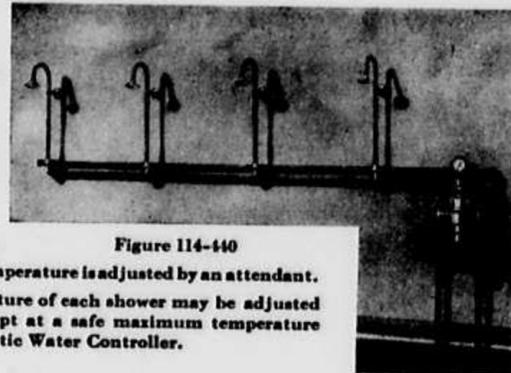


Figure 115-440
Washroom Installation of Powers Controllers.

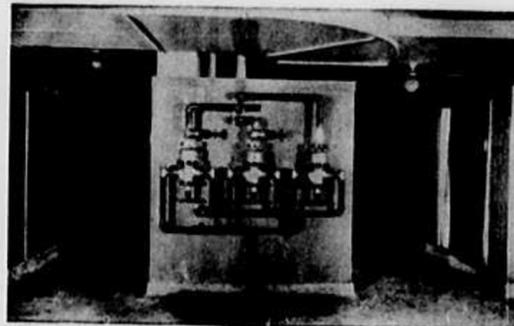


Figure 116-440
Girls' Showers, Joliet Township High School, Joliet, Ill.

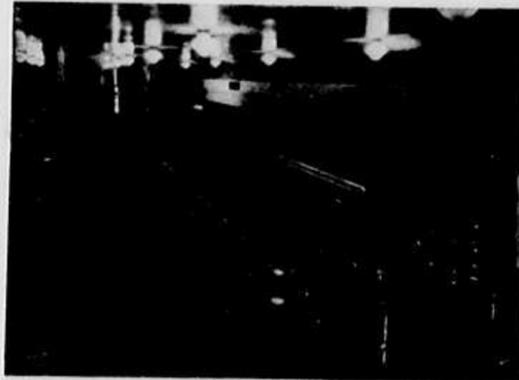


Figure 117-440
Girls' Showers, Rufus King High School, Milwaukee, Wis.

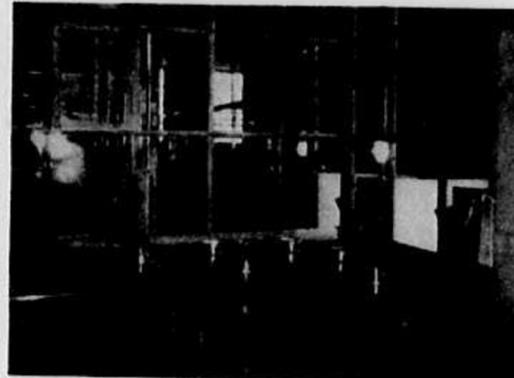
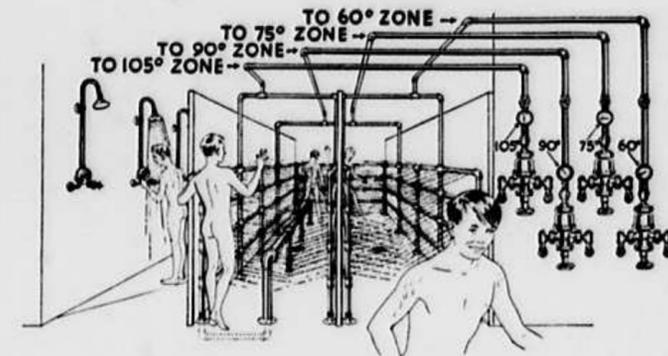
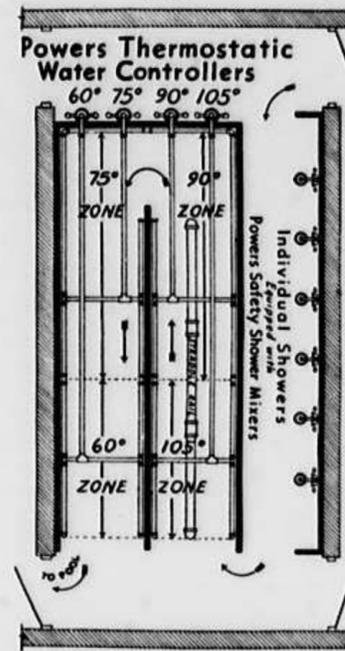


Figure 118-440
Girls' Showers, Wm. H. Lincoln Grade School, Brookline, Mass.

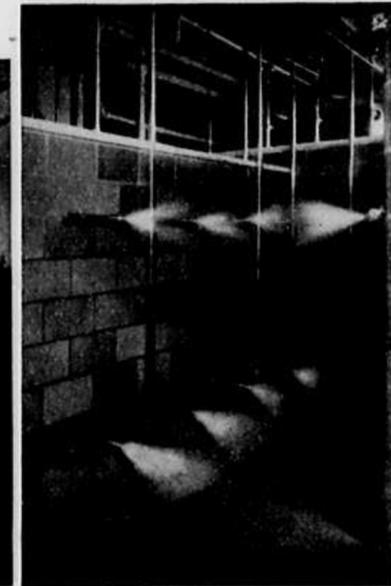
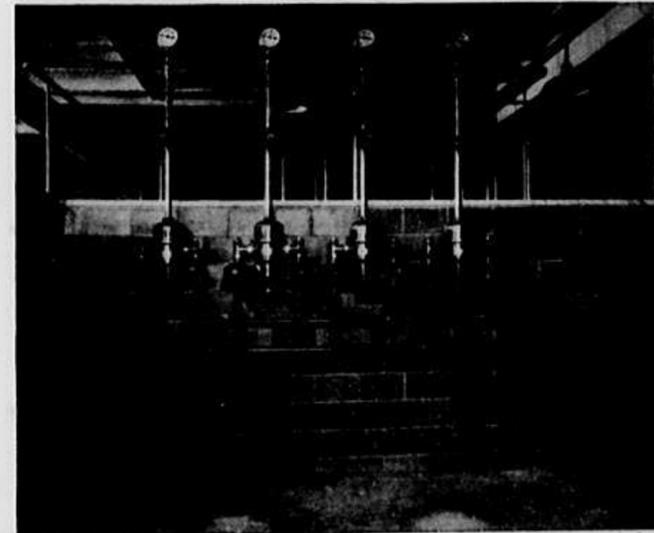
Typical Progressive or Zone Shower Installations



Left, Figure 119-440, and above, Figure 120-440
Typical Layouts of Progressive or Zone Showers.

This type of shower is particularly adapted for use in connection with school and public swimming pools. Compulsory bathing before use of the pool is obviously necessary, but the body temperature of the bather upon leaving a warm, cleansing shower is such as to cause an undesirable shock upon entering the pool. The Progressive or Zone Shower, delivering warm water in the first zone, and water of decreasing temperatures in the succeeding zones, gradually prepares the bather for the temperature of the water in the pool.

Below, Figure 121-440, and right, Figure 122-440
Boys' Progressive Shower, High School, Melrose, Mass.



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Typical Hospital Installations



Figure 123-449
Receiving Department, Charity Hospital, New Orleans, La.



Figure 121-449
Arm and Leg Baths and Scotch Douche



Figure 125-440
Flowing Baths, U. S. Veterans Hospital, Sawtelle, Cal.



Figure 127-440
Flowing Baths, Milwaukee Sanitarium, Wauwatosa, Wis.



Figure 126-440
Flowing Baths, Manteno State Hospital, Manteno, Ill.

The Powers Regulator Company manufactures the most complete line of flowing bath controls on the market today, from the simplest type made to the latest and most exacting systems available. Ask for Bulletin No. 258-H.

Typical Industrial Installations

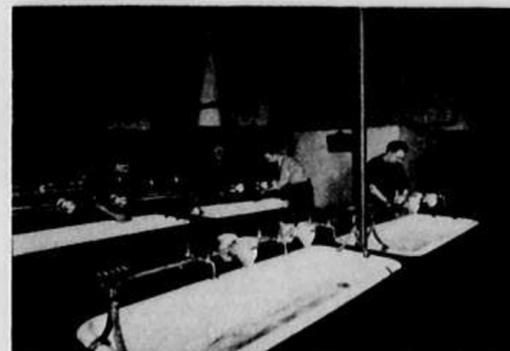


Figure 128-440
Wash Sinks, Ilg Electric Ventilating Co., Chicago, Ill.



Figure 130-440
Photographic Developing Room, National Archives Building, Washington, D. C.

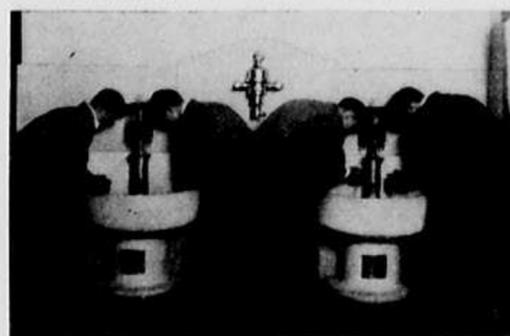


Figure 129-440
Bradley Washfountains in an Industrial Plant



Figure 131-440
Smelting Furnace, Imperial Type Metal Co., Chicago, Ill.

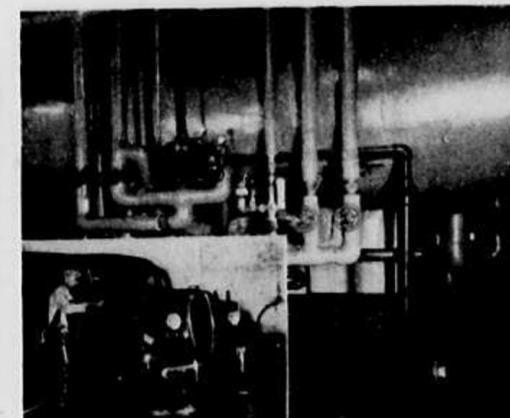


Figure 132-440
Automobile Washing, Lydy Garage, Chicago, Ill.

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

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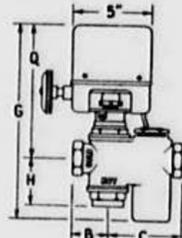
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POOR-COPY

Powers No. 9 Regulator with Three-Way Valve for Mixing Hot and Cold Water



Left, Figure 133-440 No. 9 Regulator with Three-Way Valve



Above, Figure 134-440 Principal Dimensions

This is a self-operating regulator designed to mix hot and cold water and deliver the mixture at a predetermined temperature. It is particularly recommended for hot water line control, for use on submerged or indirect type heaters, cooling water systems for Diesel and gas-line engines and air compressors, etc. The standard regulator is not recommended for use as a mixing valve to deliver tempered water direct to shower heads.

Construction—This regulator is of all metal construction with sprayed bronze finish. It is simple in design and easy to install, requiring no compressed air, water or electricity for operation. The hot water inlet is at the bottom, the cold water inlet at one side, and the outlet for the mixed water at the opposite side. The three-way valve is of the screwed type, and has a special bulb-well built into the outlet side. The operating head, which includes the bulb, all metal bellows diaphragm and adjustment feature, may be inspected and replaced without removing the valve body from the line. The regulator is furnished standard for upright installation but will be furnished inverted when specified.

Temperature Range and Adjustment—The regulator is furnished standard to operate at 140° F. with a range of adjustment of approximately 10° above and below this point. When specified, it can be furnished for any other 20° range between 100° and 180° F.

Water Pressure—Hot and cold water pressures must be approximately equal. If one pressure is considerably higher than the other, a suitable reducing valve must be used (see Bulletin No. 256). Check valves should always be installed in both hot and cold water supply lines.

How to Order—State proposed use and specify valve size, operating temperature, range of adjustment, pressures of hot and cold water, and temperature of hot water.

LIST PRICES, Capacities, Shipping Weights and Principal Dimensions

Item	Valve Size, inches...	1/2	3/4	1	1 1/4	1 1/2	2
1	List Price	\$55	\$55	\$55	\$63	\$69	\$83
2	Capacity, G.P.M. at 5 lbs.	13	16	22	36	45	110
3	G.P.M. at 20 lbs.	18	28	39	72	90	220
4	G.P.M. at 40 lbs.	25	45	60	112	150	300
5	Shipping Weight, lbs.	23	23	23	24	25	28
6	Dimension B, inches	2	2	2	2 1/2	2 1/2	2 7/8
7	Dimension C, inches	4 1/4	4 1/4	4 1/4	4 1/2	4 1/2	5
8	Dimension G, inches	11 1/2	11 1/2	11 1/2	12 1/4	12 1/4	12 1/4
9	Dimension H, inches	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	3
10	Dimension Q, inches	7 3/4	7 3/4	7 3/4	8 1/8	8 1/8	8 5/8

To prolong the life of the three-way valve and to insure accurate control, install self-cleaning strainers in both hot and cold water supply lines. See page 35.

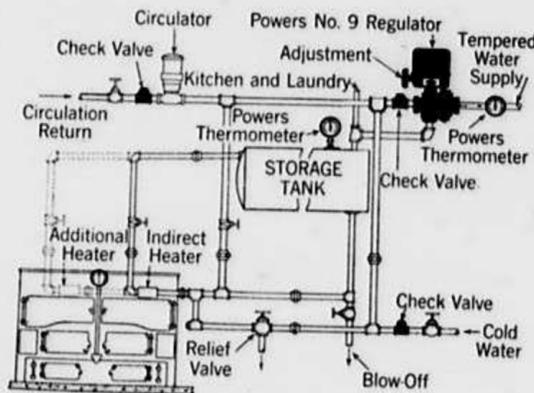


Figure 135-440 No. 9 regulator with three-way valve mixing hot water from storage tank with cold water.

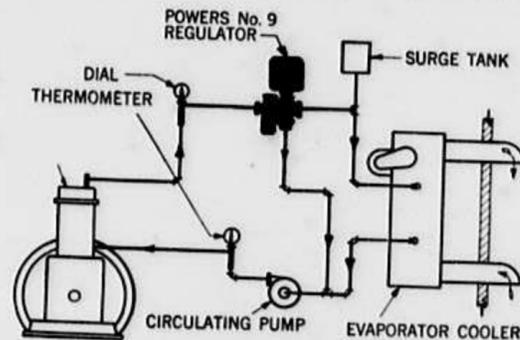


Figure 136-440 No. 9 regulator with three-way valve regulating temperature of Diesel engine jacket water.

Powers No. 10 Regulator with Three-Way Valve for Mixing Large Quantities of Hot Water and Cold Water

This unit is designed to mix hot and cold water in large volume and deliver the mixture at a constant temperature. It is used in paper mills, tanneries, and other industries that require large quantities of tempered water. It may also be piped to divert the flow of a liquid. It is not recommended for use as a mixing valve to deliver tempered water direct to shower heads.

Either compressed air or water, at 15 pounds pressure, must be used for the operation of this regulator, which is furnished with a 1/4-inch reducing valve to reduce initial pressures of not more than 85 pounds down to 15 pounds. If compressed air is available it should be used in preference to water.

Construction—The three-way valves have bronze bodies, screwed, in sizes up to 2-inch, inclusive, and iron bodies, screwed, with bronze valve seats in sizes 2 1/2-inch and larger. The bronze valve disc is of special skirted design to prevent "hunting." Iron body valves can be furnished flanged (at extra cost) when so specified. Companion flanges and bolts are not included but can be furnished at market prices when ordered. The thermostatic regulator is made of bronze and is connected to the valve top by 1/8-inch pipe. A supply pressure gauge and control pressure gauge are included. The reducing valve is equipped with a filter. A relief valve and a restriction valve are located in the line between the regulator and diaphragm top.

Temperature Range and Adjustment—Unit can be set to maintain any desired temperature within its 100° range of adjustment. Temperature adjustment is secured by turning movable pointer on dial.

Water Pressure—Hot and cold water pressures must be approximately equal. If one pressure is considerably higher than the other, a suitable reducing valve must be used (see Bulletin No. 256). Check valves should always be installed in both hot and cold water supply lines.

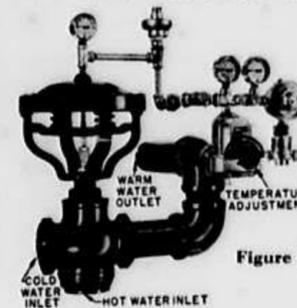


Figure 137-110

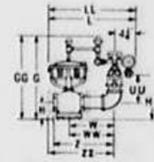


Figure 138-110 Principal Dimensions

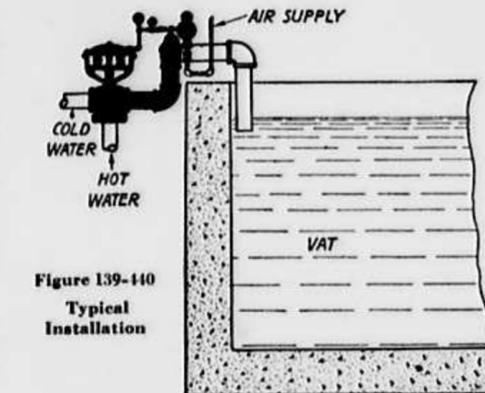


Figure 139-140 Typical Installation

How to Order—State proposed use and specify valve size, operating temperature, temperatures and pressures of hot and cold water supplies, and whether for air or water operation. If valve is to be piped for diverting, give full details as to its use.

LIST PRICES, Capacities, Shipping Weights and Principal Dimensions

Item	Valve Size, inches...	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6
1	List Price	\$172.50	\$178.25	\$189.75	\$201.25	\$230.00	\$258.75	\$287.50	\$315.00	\$402.50	\$460.00	\$560.00
2	Capacity, G.P.M. water at 5 lbs.	15	25	40	60	110	160	240	450	640	960	1440
3	Capacity, G.P.M. water at 20 lbs.	30	55	90	120	220	360	480	880	1440	2000	2650
4	Capacity, G.P.M. water at 40 lbs.	40	75	120	160	300	480	640	1200	1900	2650	3500
5	Shipping Weight, pounds	80	80	90	100	110	140	145	290	400	500	650
6	Dimension G, Screwed Body, inches	13 3/8	14 1/2	16 3/8	17 1/4	18 3/8	19 3/4	20 5/8	27 3/8	29 3/8	31 3/4	35 1/4
7	Dimension G, Flanged Body, inches	17 1/2	18 1/2	20 1/2	22 1/2	24 1/2	26 1/2	28 1/2	30 1/2	33 1/2	35 1/2	38 1/2
8	Dimension H, inches	17 1/2	18 1/2	20 1/2	22 1/2	24 1/2	26 1/2	28 1/2	30 1/2	33 1/2	35 1/2	38 1/2
9	Dimension L, Screwed Body, inches	16 3/8	17 1/4	18 3/8	19 3/4	20 5/8	21 3/4	22 5/8	24 1/4	25 3/4	27 1/4	29 1/4
10	Dimension L, Flanged Body, inches	21 1/2	22 1/2	24 1/2	26 1/2	28 1/2	30 1/2	32 1/2	34 1/2	36 1/2	38 1/2	40 1/2
11	Dimension UU, inches	3 1/4	3 1/2	4	4 1/2	5 1/4	6	6 1/2	7 1/4	8 1/4	9 1/4	10 1/4
12	Dimension WW, Screwed Body, inches	9	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2
13	Dimension WW, Flanged Body, inches	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2	19 1/2	20 1/2	21 1/2	22 1/2
14	Dimension YY, inches	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2	19 1/2	20 1/2	21 1/2	22 1/2
15	Dimension YY, inches	19 1/2	19 1/2	20 1/2	21 1/2	22 1/2	23 1/2	24 1/2	25 1/2	26 1/2	27 1/2	28 1/2
16	Dimension ZZ, Screwed Body, inches	10 3/8	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2	19 1/2	20 1/2
17	Dimension ZZ, Flanged Body, inches	17	17 1/2	18 1/2	19 1/2	20 1/2	21 1/2	22 1/2	23 1/2	24 1/2	25 1/2	26 1/2

To prolong the life of the three-way valve and insure accurate control, install self-cleaning strainers in both supply lines. See page 35.

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Powers No. 11 Regulator with Three-Way Valve for Mixing Hot and Cold Water

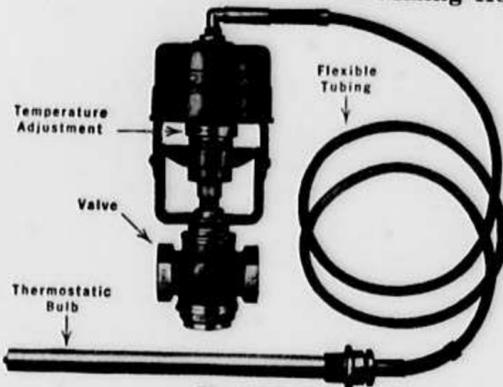


Figure 140-440

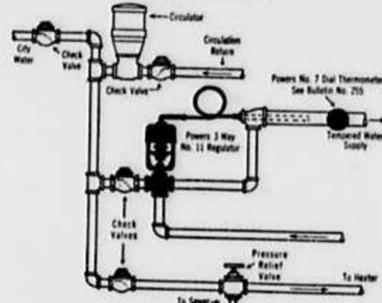


Figure 141-440

No. 11 regulator with three-way valve mixing hot water from indirect heater with cold water.

This self-operating unit mixes hot and cold water and may be used to deliver water at a constant temperature to wash sinks and fountains, air washer units, humidifiers, industrial processes, etc. It may also be piped to divert the flow of a liquid. It is not intended for use as a mixing valve to deliver tempered water direct to shower heads.

Construction—Valve sizes 1/4-inch and 3/8-inch have bronze bodies with union connections; sizes 1/2-inch to 2-inch, inclusive, have bronze bodies, screwed; sizes 2 1/2-inch to 4-inch have iron bodies, screwed, but can be furnished flanged with standard drilling at extra cost. Sizes 3/4-inch and up have valve discs of special skirted design to prevent "hunting." Thermostatic bulb is copper, with pipe threaded bushing and union nut. Flexible tubing is copper with bronze protective sheathing; standard lengths are shown in price list.

Temperature Range and Adjustment—Regulator is furnished standard to operate at 140° F., with a range of adjustment of approximately 20° either way; any other 40° range between 60° and 250° F. may be had. Regulator can be furnished at extra cost for operation between 40° and 60° F. Spring and collar adjustment is standard, but dial adjustment can be furnished at extra cost for valve sizes 1/4-inch to 3/4-inch, inclusive.

Water Pressure—Hot and cold water pressures must be approximately equal. If one pressure is considerably higher than the other, a suitable reducing valve must be used (see Bulletin No. 256). Check valves should always be installed in both hot and cold water supply lines.

How to Order—State proposed use and specify valve size, operating temperature, range of adjustment; temperature and pressure of hot and cold water; and whether bulb will be installed horizontally, vertically pointing upward, or vertically pointing downward. If valve is to be piped for diverting, give full details as to its use.

LIST PRICES, Capacities, Shipping Weights and Principal Dimensions

Item	Valve Size, inches	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
1	Temperatures between 60° and 250° F.	\$66	\$66	\$78	\$84	\$90	\$96	\$108	\$126	\$144	\$156	\$210
2	Temperatures between 40° and 60° F.	\$78	\$78	\$90	\$96	\$102	\$108	\$120	\$138	\$156		
3	Capacity, G. P. M. Water at 5 lbs.	3	4	13	16	22	36	45	110	160	240	450
4	Capacity, G. P. M. Water at 20 lbs.	5	7	18	28	39	75	90	220	360	480	880
5	Capacity, G. P. M. Water at 40 lbs.	7	10	25	45	60	112	150	300	480	640	1200
6	Shipping Weight, pounds	21	22	24	25	25	30	30	35	75	85	125
7	Dimension A, inches	9 1/4	9 1/4	9 3/4	9 3/4	9 1/2	10	10 1/4	15 1/4	15 1/4	15 1/4	16 1/4
8	Dimension B, Screwed, inches	1 1/4	1 1/4	1 1/2	1 3/4	2 1/4	2 1/4	2 1/4	2 1/4	4	4 1/2	5 1/4
9	Dimension B, Flanged, inches											8 1/4
10	Dimension C, Double Union, inches	4 1/2	4 1/2						6 3/4			
11	Dimension C, Screwed, inches			2 3/8	3 3/8	3 3/4	4 1/4	4 1/4	5 1/4	8	8 3/4	10 1/4
12	Dimension C, Flanged, inches											
13	Dimension D (125°-250°), inches	1	1	1	1	1	1	1	1	1 1/4	1 1/4	1 1/4
14	Dimension D (60°-125°), inches	1	1	1	1	1	1	1	1	1	1	1
15	Dimension E (125°-250°), inches	8	8	10	10	12	14	14	16	18	20	20
16	Dimension E (60°-125°), inches	16	16	18	12	14	16	16	20	24	30	30
17	Dimension F, inches	5	5	5	5	5	5	5	6 1/4	6 1/4	6 1/4	6 1/4
18	Standard length of flexible tubing, feet	6	6	6	6	6	6	6	6	6	6	6
19	For additional tubing, add 50c net per foot.											
20	For dial adjustment, add \$5.50 list to items 1 and 2.											



Figure 142-440

*Bulb is 20 inches long with 1 1/4-inch tank bushing. To prolong life of three-way valve and insure accurate control, install self-cleaning strainers in both supply lines. See page 35.

Other Powers Regulators for Mixing Hot and Cold Water

Illustrated below are more of the many different types of controls we make. No other firm manufactures such a complete line of devices to regulate the mixing of hot and cold water.

Whenever special problems of temperature regulation arise, let our engineering department study your requirements and recommend the type of control that will give you the best results.

All of the illustrations below show direct acting regu-

lators. In these installations, should the air supply to the regulator fail the valve springs will move the disc so that the cold water supply is shut off and only hot water allowed to pass through the mixing valve.

If it is preferred to stop the flow of hot water should the air supply fail, allowing only cold water to flow, a reverse acting regulator must be used, in which case the cold water must enter at the bottom of the valve and the hot water at the side.

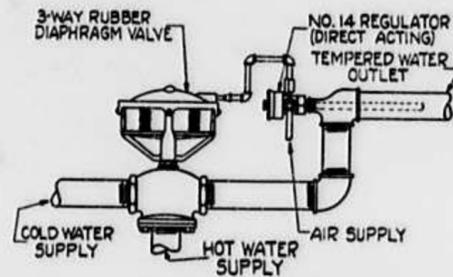


Figure 143-440
Powers No. 14 Regulator with Three-Way Mixing Valve (See Bulletin No. 232)

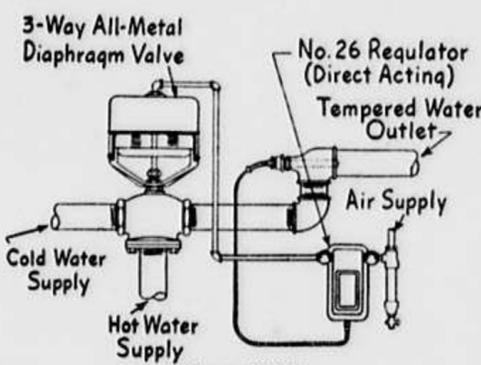


Figure 144-440
Powers No. 26 Regulator with Three-Way Mixing Valve (See Bulletin No. 226)

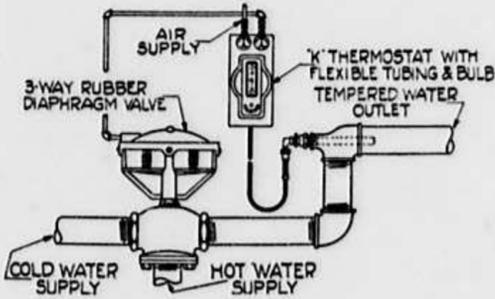


Figure 145-440
Powers Type K Remote Bulb Thermostat with Three-Way Mixing Valve (See Bulletin No. 201)

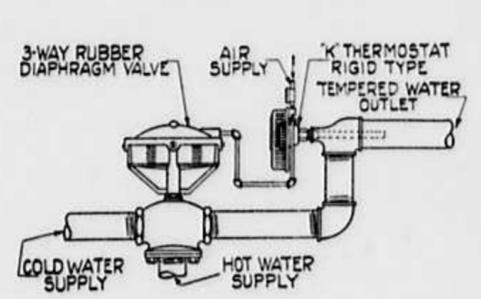


Figure 146-440
Powers Type K Rigid Bulb Thermostat with Three-Way Mixing Valve (See Bulletin No. 201)

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Powers Indicating and Recording Thermometers



Figure 147-440
No. 8 Dial for Shower Use

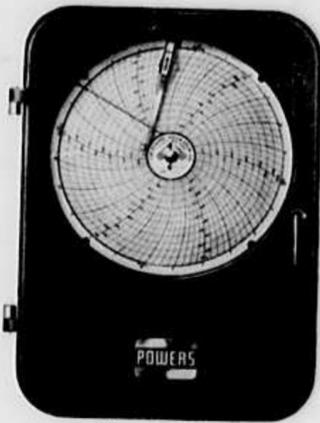


Figure 148-440
Rectangular Case Recording
Thermometer



Figure 149-440
Recording Thermometer with
Electric Alarm Feature

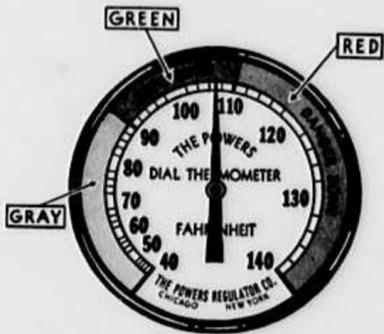
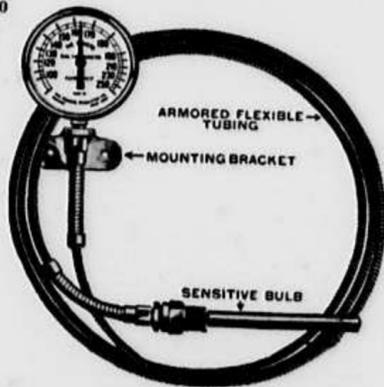


Figure 150-440
Three-Color "Safe Zone" Dial
for Control Tables

Shown on this page are various types of Powers thermometers for indicating and recording water temperatures. They are used extensively on hot water heaters of all kinds, in hot water lines, and to show the temperature of water delivered by mixing valves. Their use is extremely important in the hydrotherapeutic field.

Bulletin No. 255 gives complete information.

Right, Figure 154-440
Remote Bulb Dial
Thermometer



Right, Figure 153-440
Vertical Bulb Dial
Thermometer



Left, Figure 151-440
45°-Angle Bulb Dial
Thermometer for
Control Table



Above, Figure 152-440
Horizontal Bulb Dial
Thermometer

Powers Self-Cleaning Strainer

For use on pipe lines carrying water, air, gas, oil or steam. Efficiently removes entrained dirt, scale and other foreign matter. Can be cleaned by opening blow-off valve without removal of screen. Furnished with either semi-steel or cast bronze body, screwed, suitable for pressures up to 250 lbs. and temperatures up to 500° F. Specify size, type, and fluid to be handled.

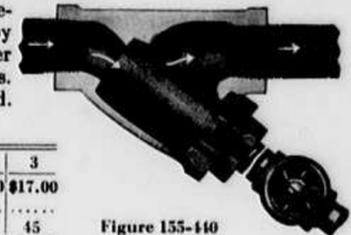


Figure 155-440

LIST PRICES and Shipping Weights

Item	Pipe size, inches	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1	Semi-Steel	\$2.50	\$2.50	\$3.00	\$3.75	\$4.50	\$5.25	\$6.00	\$9.00	\$13.00	\$17.00
2	Cast Bronze	\$3.50	\$3.50	\$5.00	\$6.00	\$7.00	\$8.00	\$12.00	\$18.00		
3	Shipping Wt., lbs.	1	1	2	3	5	7	10	17	37	45

Blow-off valve is not included in above prices.

Powers Hot Water Tank Regulators

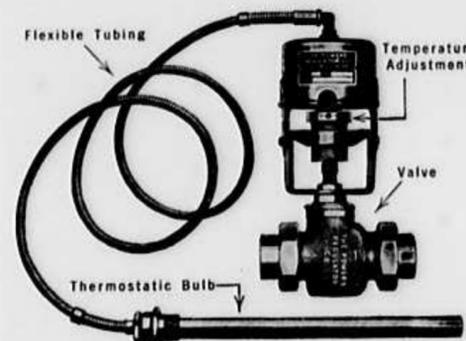


Figure 156-440, Powers No. 11 Regulator

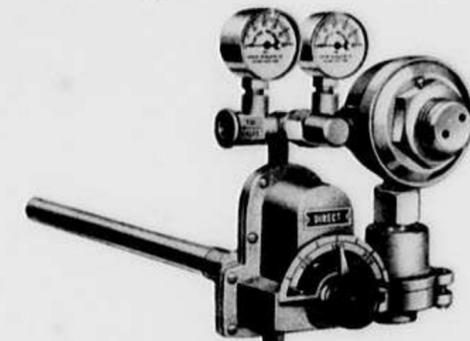


Figure 157-440, Powers No. 10 Regulator

Hot water intended for washing, showers, hospital use and industrial processes should, whenever possible, be obtained from ample capacity storage tank heaters, and these heaters should be under the control of a reliable hot water tank regulator. The self-contained No. 11

regulator is generally used for this purpose. However, for instantaneous heaters or storage tank heaters with an auxiliary coil, the air or water operated No. 10 regulator with an all metal or rubber diaphragm valve is recommended.

Bulletin No. 2035 gives complete information and prices on both regulators.

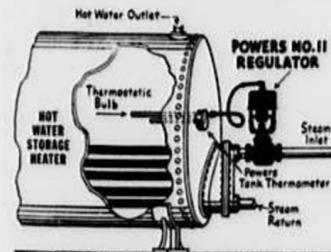
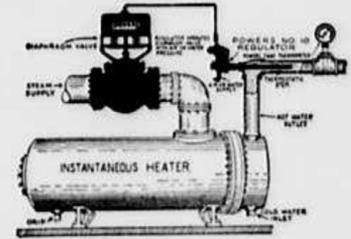


Figure 158-440, No. 11 Regulator on
Storage Tank Heater



Above left, Figure 159-440
All Metal Diaphragm Valve



Above right, Figure 160-440
Rubber Diaphragm Valve

Figure 161-440, No. 10 Regulator on
Instantaneous Heater

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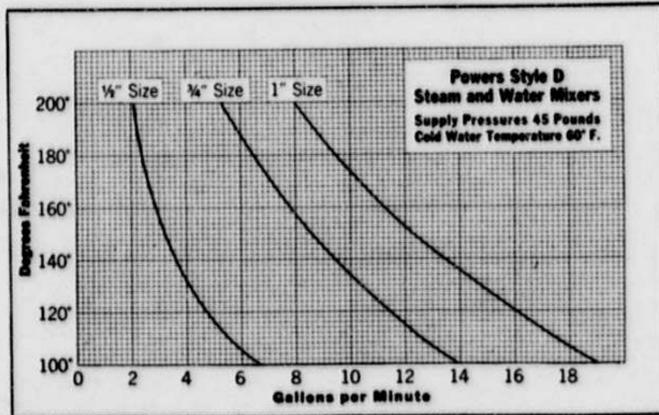
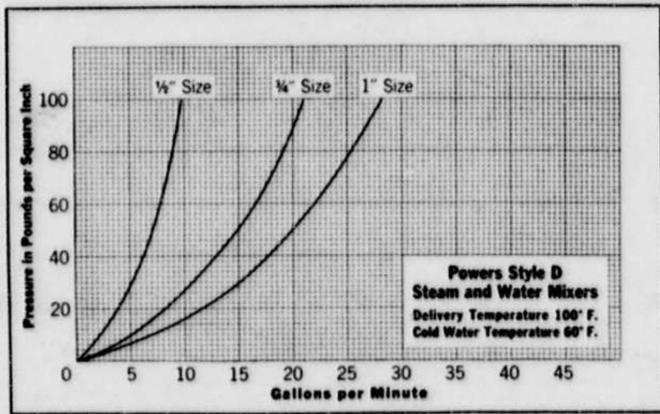
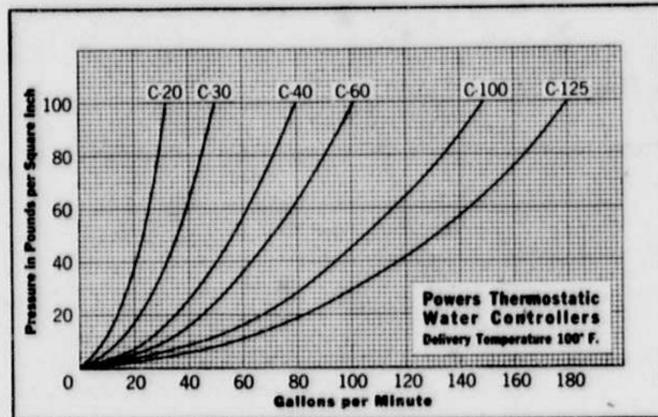
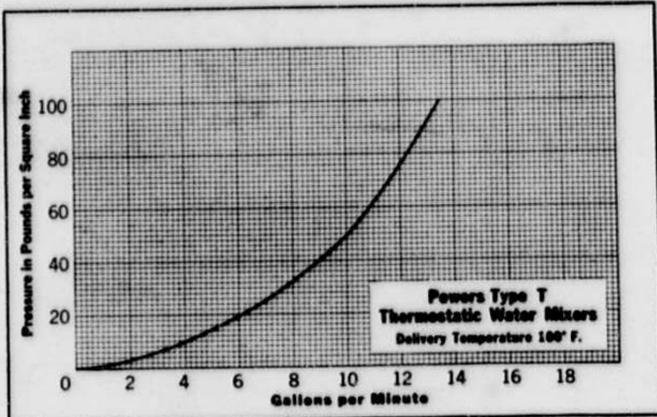
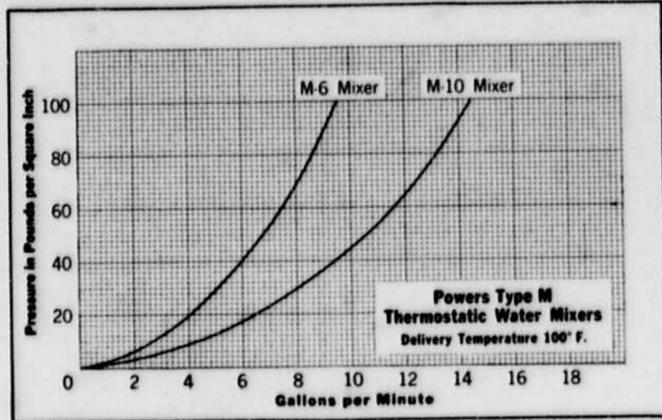
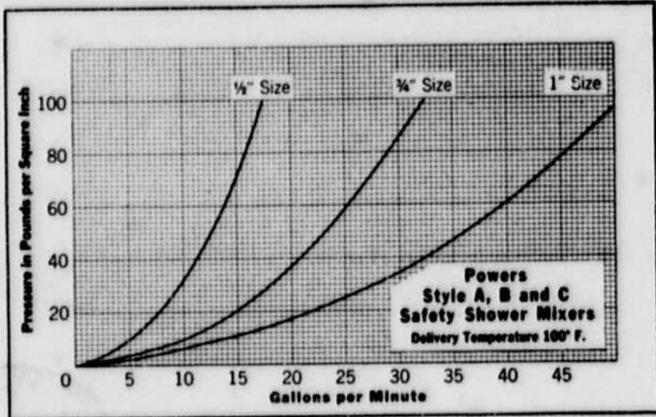
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Flow Curves for Powers Mixing Valves

Charts Nos. 1 to 5, inclusive, show capacities in gallons per minute based on a delivery temperature of 100° F. Chart No. 6 shows capacities in gallons per minute for various delivery temperatures with constant steam and water pressures of 45 pounds. Ratings are based on discharge to atmosphere.



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Missionary Society of the Church of England in Canada
INDIAN & ESKIMO RESIDENTIAL SCHOOL COMMISSION

REV. S. J. WICKENS, B.A., B.D.
Principal

ST. MICHAEL'S SCHOOL
Alert Bay, B. C.
April 15, 1944

Indian Agent,
Alert Bay, B.C.

Dear Mr. Todd:

Following our conference and inspection of the School of recent date, I wish to recapitulate the recommendations made at that time with respect to improvements and repairs needed to the fabric at St. Michael's.

- Recommendations: -
1. That a machinery shed be built near the remains of the present shed, costing about \$450.00 ... this work to be largely done by the boys as a Manual Instruction project.
 2. That the present crude tin extension to the piggery be substituted by a lumber construction costing approximately \$100.00 the work to be done as above.
 3. Painting the outside buildings, piggery pump house, garage, and Manual Training shop. Estimating 40 gallons of paint at \$85.90 ... the work to be done by the boys.
 4. Painting, varnishing etc. inside of School. Estimated cost of \$70.00 ... the work to be done by the boys.
 5. Painting outside windows of School. This because of height and scaffolding necessary, should be done by contract and will cost not less than \$100.00.
 6. The Engineer's house is incomplete. From floor to ground it should be closed in, verandah repaired and the whole painted, (two coats). Estimate of lumber and paint - \$150.00. The work could be done by the boys.

p.t.o.

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

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CANADA

POOR-COPY

Ottawa, July 12, 1945.

Memorandum:

DEPARTMENTAL PURCHASING AGENT.

Re: File 46,411-15-2 B.C.

PP
I received your memorandum of January 29, regarding a Powers temperature regulating valve for the hot water storage tank at the Alert Bay School. I immediately wrote to the Indian Agent. I have just received a reply in which he states that purchase of this equipment is not now considered necessary. Therefore no further action need be taken.

Philip Phelan,
Chief, Training Division.

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

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POOR-

INDIAN COMMISSIONER
BRITISH COLUMBIA



CANADA

DEPARTMENT
OF
MINES AND RESOURCES

156-0-5

INDIAN AFFAIRS
BRANCH

IN YOUR REPLY REFER TO

NO. 6-11-4

ALSO TO DATE OF THIS LETTER

P.O. BOX 70
VANCOUVER, B.C. July 6, 1945.

Indian Affairs Branch, Dept. of Mines & Resources,
Ottawa, Ontario.

Your File 156-0-5

With reference to Mr. Phelan's letter of January 31st regarding the supply of a temperature regulating valve for the Alert Bay Indian Residential School, I enclose herewith Mr. Indian Agent Todd's letter of July 4th from which it will be noted that the Principal does not consider the purchase of this equipment necessary.

Your letter dated January 22nd from The Canadian Powers Regulator Co., Ltd., and catalogues Nos. 229 and 258 are returned herewith.

D.M. MacKay,
Indian Commissioner for B.C.

-KT
Encls.



Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

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CANADA

POOR-C

OFFICE OF THE
INDIAN AGENT



CANADA
DEPARTMENT
OF
MINES AND RESOURCES
INDIAN AFFAIRS BRANCH

PLEASE QUOTE
FILE _____

Alert Bay, B. C.,
July 4th, 1945.

Indian Commissioner for B. C., Department of Mines
and Resources, Vancouver, B. C.

Replying to your letter of Feb. 7th last,
file #215-6-8928, I beg to enclose you, herewith,
letter received from Principal Wickens, which will
be self-explanatory.

Evidently Mr. Wickens does not consider the
purchase of this equipment necessary and, therefore,
no further action is contemplated.

I enclose you letter and bulletins forwarded
with your letter of February 7th last.

Encs.

M. S. Todd
(M. S. Todd)
Indian Agent.

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

PUBLIC ARCHIVES

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CANADA

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ESTABLISHED 1891



TELEPHONE ELGIN 7673

THE CANADIAN POWERS REGULATOR CO., LTD.

Automatic Temperature Controlling Apparatus

195 SPADINA AVE.

T O R O N T O Jan. 22nd, 1945

Postal District 2-B

Dept. of Mines and Resources,
General Administrative Offices,
Purchasing Division,
Ottawa, Ontario.



Attention: Mr. H. J. Davidson, Departmental Purchasing Agent

Gentlemen: Re: File 46,411-15-2 B.C.

As outlined in our conversation when we visited Ottawa, we now have available a 2½" #11 regulator which we can supply to be used for the purpose required. We are assuming that this is low pressure steam, that is up to 50# gauge pressure and are quoting on a bronze trimmed valve accordingly.

We understand that this regulator is to control the steam on a converter which heats the hot water storage tank, and that the tank supplies water directly to shower heads. Since there is a great risk here that the deposit of scale might become lodged beneath the seat of the valve, which would result in over heating of the tank, or that the capillary system of the regulator might fail, we would recommend the installation of a thermostatic water controller to mix hot water from the tank with cold water, giving tempered water at a maximum of 115°F. Since the thermostatic water controller will give a direct shut-off on failure of cold supply, this is a positive protection against scalding.

While the regulator is necessary and desirable, it is not, in any sense, a safety control, and as there have been several severe accidents resulting from the use of a regulator alone, we wish to place ourselves on record as definitely recommending a thermostatic water controller. Our quotation is as follows:

1 2½" #11 regulator, double seated bronze trimmed valve, iron body with screwed connections, temperature range 140-180°F., with spring and collar adjustment with standard copper bulb and 8' of flexible tubing.....	\$114.00
	9 12
Sales Tax extra	123.12

More than 50 different types of Regulators - to Control the Temperature of Liquids, Gas and Air

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

PUBLIC ARCHIVES

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CANADA

POOR-COPY

Department of Mines and Resources

1 C40 thermostatic water controller, chromium plated for exposed mounting, upward discharge maximum temperature 115°F., having 1" inlets and 1 1/4" outlets with a delivery capacity of 53 U.S. gallons per minute at 45# water pressure. This capacity should be sufficient to serve from six to ten showers.....\$187.25

Sales Tax included

If exemption is claimed, allowance 4%.

The above prices are net f.o.b. Toronto. Delivery period on the regulator approximately 2-3 weeks, and on the controller 10-12 weeks.

We wish to thank you for the opportunity of making this quotation, and trust we may have the pleasure of serving you.

Yours truly,

THE CANADIAN POWERS REGULATOR CO., LIMITED

per

[Handwritten signature]

CJB/G

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

PUBLIC ARCHIVES

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CANADA

POOR-C

156-0-5

AIR MAIL

Ottawa, July 28th, 1945.

Major D.M. MacKay, Indian Commissioner, P.O.
Box 70, Vancouver, B.C.

In reply to your letter of the
26th instant, the Department approves an
expenditure of \$50.00 for retubing the boiler
at the Alert Bay Indian Residential School.

Philip Phelan,
Chief, Training Division.

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

PUBLIC ARCHIVES

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CANADA

POOR-COP

INDIAN COMMISSIONER
BRITISH COLUMBIA



IN YOUR REPLY REFER TO

NO. **6-11-3**

ALSO TO DATE OF THIS LETTER

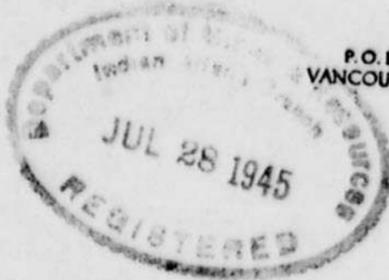


CANADA

DEPARTMENT
OF
MINES AND RESOURCES

156-0-5.
INDIAN AFFAIRS
BRANCH

Airmail



P.O. BOX 70
VANCOUVER, B.C. July 26, 1945.

Indian Affairs Branch, Dept. of Mines & Resources,
Ottawa, Ontario.

I am advised by the Reverend S.J. Wickens through Mr. Indian Agent Todd that the small horizontal boiler used for hot water heating at the Alert Bay (St. Michael's) Indian Residential School requires retubing, one of the tubes having blown out some months ago and been plugged.

This matter has been discussed with Mr. Arnall of the Public Works Department who has suggested that the boiler be shipped to the Blaine Iron Works in Vancouver for repairs. A quotation was received on retubing this boiler in 1942 from Patterson Iron Works at a cost of \$45.00, plus freight both ways, and it is not anticipated that the present cost of retubing will exceed this amount to any great extent. An amount of \$50.00 was provided in the estimates for this purpose and it is recommended that authority be granted to have the boiler shipped to Vancouver and repaired. Please let me have a reply by air mail.

*Reply
air mail*

-KT

D.M. MacKay

D.M. MacKay,
Indian Commissioner for B.C.

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

PUBLIC ARCHIVES

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CANADA

POOR-C

6-11-4

Ottawa, July 17, 1945.

AIR MAIL

Major D. M. MacKay, Indian Commissioner for B.C.,
Box 70, Vancouver, B.C.

I have your letter of the 7th instant, enclosing a list of repairs which are considered necessary at the Alert Bay Indian Residential School. The total amount of the repairs requested is \$1,005.90. When preparing our appropriation for the current fiscal year, it was found possible to include an amount of \$900.00 only for repairs and improvements and the purchase of new equipment at this school during the current fiscal year.

Q

I presume you have a copy of the Principal's letter and you may arrange for the repairs considered most urgent, on the understanding that the total expenditure will not exceed the amount of \$900.00.

Philip Phelan,
Chief, Training Division.

*V.R. 230 - # 193.34 passed 2/21/45
V.R. 259 - 166.56 passed 2.1.46*

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

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INDIAN COMMISSIONER
BRITISH COLUMBIA

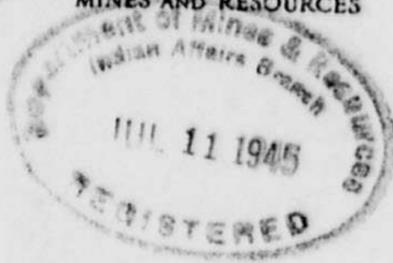


CANADA

INDIAN AFFAIRS
BRANCH

IN YOUR REPLY REFER TO
NO 6-11-4
ALSO TO DATE OF THIS LETTER

DEPARTMENT
OF
MINES AND RESOURCES



P.O. BOX 70
VANCOUVER, B.C. July 7, 1945.

Indian Affairs Branch, Dept. of Mines & Resources,
Ottawa, Ontario.

I enclose herewith Mr. Indian Agent Todd's letter of July 4th and enclosure referred to therein in connection with repairs required at the St. Michael's Indian Residential School.

These items are listed in the 1945-46 estimates and if funds are available I will request Mr. Todd to secure estimates and quotations for the material and labour required.

\$ 400⁰⁰ available.
-kt
Enc.

James Colman
w D.M. MacKay,
Indian Commissioner for B.C.

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

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OFFICE OF THE
INDIAN AGENT



CANADA
DEPARTMENT
OF
MINES AND RESOURCES
INDIAN AFFAIRS BRANCH

PLEASE QUOTE
FILE _____

Alert Bay, B. C.,
July 4th, 1945.

Indian Commissioner for B. C., Department of Mines
and Resources, Vancouver, B. C.

In the Estimates for 1945-1946 the Principal
of St. Michael's Indian Residential School, requested
the enclosed list of repairs, etc. be undertaken, and
he is now asking if funds have been provided for these
purposes.

Each item requested is badly needed in the
preservation and upkeep of Government owned buildings,
and I would strongly recommend that the work be done
if at all possible.

Would the Department kindly advise me if funds
for items 1 - 7 have been provided for. If so, estimates
and tenders will be submitted upon advice from the
Department.

Encs.

M. S. Todd
(M. S. Todd)
Indian Agent.

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

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CANADA

POOR-COPY

Monthly Report from St Michael's Preventorium. Month of June 19 45

Name of Patient	Band and School	Age	Sex	Date of Admission	Date of Discharge	No. of days treated in month	Progress and Remarks
Speck, Ernest	Klondike 17	11	M.	April 11. 44		30	General improvement.
Stow, Barbara	Kwakiwiltanuk	15	F.	June 10. 44		30	"
Stronghewney, Helen	Isawalainuk	14 ⁶ / ₁₆	F.	July 7. 44		30	"
Swythe, Joyce	Gillaklawine	14 ⁶ / ₁₆	F.	Dec 26. 44		25	Admitted - 5 days. Improvement - gaining weight.
Nelson, Sarah	Isawalainuk	15 ¹ / ₁₆	F.	Dec 2. 44		30	General improvement. High vitals. High vitals.
Berrick, Sally	Gillaklawine	15	F.	Dec 26. 44		30	"
McKay, Benjamin	Greenwill	12 ¹¹ / ₁₆	M.	"		30	"
Hunt, Geoffrey	Isawalainuk	10	M.	"		30	"
Malipi, David	Malipi	12 ¹ / ₁₂	M.	Jan 24. 45		30	"
Robinson, Maude	Greenwill	14 ⁶ / ₁₂	F.	Feb 12. 45		30	"
Alfred, Frank	Nimprish	12 ¹¹ / ₁₂	M.	April 3. 45		30	Improving - gained weight.
Rutland, Lawrence	Mettakalala	11	M.	" 19. 45		30	"
" Clifford	"	9 ⁶ / ₁₂	M.	"		30	"
Bidwood, Fanny	Port Simpson	8?	M.	June 6. 45		25	Admitted from Port Simpson Hospital.
Williams, Mary	Kwakiwiltanuk	13	F.	June 17. 45		15	" Subst. stomach. Right treatments.
Thompson, Mary	Queen's Bay 10	11 ⁶ / ₁₆	F.	June 25. 45		3	" " for 5 days.
TOTAL						426	William J. Lacey P.N. Malipi

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

POOR-COPY

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www.collectionscanada.gc.ca

DEPARTMENT OF MINES AND RESOURCES

FORM No. I.A. 506A

INDIAN AFFAIRS BRANCH

TREASURY ONLY

CHEQUE No.....

DATE.....

Medical
1945-1946

Pay to Indian Residential School Commission, MSCC,

Address 38 - 43 The Bible House,

184 - E. Alexander Ave.,

Winnipeg, Man.

DATE	SERVICE	AMOUNT
1945 June 30	Report and account for maintenance of patients in the Alert Bay Preventorium during the month of June, 1945:- 426 days @ \$1.00 per day	\$426.00

I HEREBY CERTIFY that this Voucher is correct, that the material has been supplied, the work performed and that the charges are fair and just, also that the expenditure has been incurred legitimately and that each item of the same is a fair and just charge against the Government of Canada. This expenditure was authorized by Departmental Letter, File No. 156-0-28 dated Oct. 22/42

VOUCHER No. 110

DATE July 23 45 *M. Sear* Agent

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

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CANADA

POOR-COPY

156-0-5

[Handwritten signature]

OCT 5 1945
REGISTERED

Alert Bay, B. C.,
Sept. 28th, 1945.

Indian Commissioner for B. C., Department of Mines
and Resources, Vancouver, B. C.

On July 4th last I wrote you enclosing copy of letter received from Principal Wickens, in which he requested immediate repairs to their horizontal boiler used for hot water heating in the school. He pointed out it was an emergency repair job and requested immediate approval, and at the same time mentioned that the boiler had been purchased from the Patterson Boiler Works in 1942.

When we had received no reply to our letter at the end of July, Mr. Wickens shipped the boiler to the Patterson Boiler Works, Vancouver, with a request for immediate repairs, and the job was completed with a week and returned to the school.

After the boiler had been shipped we received your letter of July 30th on August 1st, requesting to have the boiler shipped to the Blaine Iron Works in Vancouver.

M. S. Todd
(M. S. Todd)
Indian Agent.

Encs.

c.c. - Ottawa.

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

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CANADA

POOR-COPY

DEPARTMENT OF MINES AND RESOURCES

Purchase Order

No 19708 A

Indian Residential School Commission,
184 Alexander St. E.,
Winnipeg, Man.

P.O. Box 70,
Vancouver, B.C., Oct. 4th 1945.

THIS NUMBER TO BE SHOWN ON ALL PACKAGES AND INVOICES

Please forward the following materials to the address given below, and charge to the account of the Department of Mines and Resources.

Render a separate invoice for each order and send 3 copies to M. S. Todd, Esq., Indian Agent, Alert Bay, B.C. when goods are shipped.

Quantity	DESCRIPTION	UNIT	TOTAL
	For Repairs to the engineer's house and Preventorium, at Alert Bay Indian Res. School		
	Purchase of paint, brushes, etc. from Marshall-Wells B.C. Ltd., Vancouver, B.C. for use on the above project.....		\$168 56

*VR 259
Passed 2-1-46*

Prices F.O.B. Vancouver, B.C. as per your of

Shipping Instructions Upon instructions of Mr. Indian Agent Todd.

Chargeable to Appropriation for INDIAN EDUCATION. Vote 76 Primary 10-691. Encumbrance No. Copy for Head of Branch

Date to be delivered: AS instructed by Mr. Todd. D. Mackay (Issuing Officer) Indian Commissioner for B.C.

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

PUBLIC ARCHIVES ARCHIVES PUBLIQUES CANADA

POOR-COPY

DEPARTMENT OF MINES AND RESOURCES

FORM No. I.A. 506A

INDIAN AFFAIRS BRANCH

TREASURY ONLY

Indian Education
76-10-691
1945-1946

Pay to Gordon and Belyea, Ltd.,Address 101 Powell St.,Vancouver, B. C.

CHEQUE No.....

DATE.....

DATE	SERVICE	AMOUNT
1945 Oct. 13	To material supplied for re-building of piggery and machine shed, as per invoice and prepaid freight bill attached:-	\$193.34
	Purchase Order #19634-A	
	RECOMMENDED	
	<i>[Signature]</i> Indian Commissioner for B. C.	

875-76-10-691
30-11-45
Voucher in duplicate
for Accountant to pass
ER, 1298

I HEREBY CERTIFY that this Voucher is correct, that the material has been supplied, the work performed and that the charges are fair and just, also that the expenditure has been incurred legitimately and that each item of the same is a fair and just charge against the Government of Canada. This expenditure was authorized by Departmental Letter, File No..... dated.....

VOUCHER No. 230

DATE

Nov. 17/45

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

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CANADA

POOR-CO

1 19. 185-7-45

GORDON & BELYEA LIMITED

PACIFIC 4244
W.P.T.B. 34927

WHOLESALE HARDWARE AND SHIP CHANDLERY

Builders' Hardware, Sporting Goods, Mechanics' Tools,
Engineering, Logging, Mill, Mine and Waterworks Supplies.

ALL GOODS SOLD STRICTLY F.O.B. OUR
WAREHOUSE, UNLESS OTHERWISE STATED

WE RESERVE THE RIGHT TO DEMAND PAYMENT
OF THIS BILL AT ANY TIME WITHOUT NOTICE.

INTEREST ON PAST DUE ACCOUNTS CHARGED
AT THE RATE OF 7 PER CENT PER ANNUM.

101 POWELL STREET
VANCOUVER, B. C.

DATE **OCT 13TH 1945**
INDIAN RES. SCHOOL

SHIPPED TO **S J WICKENS**

SHIPPED VIA
37319

OUR INVOICE NO. **19634A**

YOUR ORDER NO.

SOLD TO **DOMINION GOVERNMENT
DEPART MINES & RESOURCES
25 M S TODD INDIAN AGENT
ALERT BAY B.C.**

NETT

TERMS:

YOUR S. T. L. NO.

3 Ke	2 1/2" COM WIRE NAILS	3	5 21 Kg	15 63
2"	4" DO	2	5 06	10 12
20 Lb	7" COM WIRE NAILS	20	5 25 C	1 05
20 "	1 1/2 X 15 GA BLUED SHINGLE NAILS	20	7 21 C/Lb	1 44
6 DRY	X 5' S INTERNATIONAL OIL SIDE GREY PAINT #1036	30	2 80 GAL	84 00
2"	X 5' S DO WHITE	10	2 80 GAL	28 00
10 GALS	CEDARKOTE RED SHINGLE PAINT TILE RED	10	2 00 GAL	20 00
8 DRY	X 10 FT LENS # 31 B D TRACK	80	23 FT	18 40
4 PR	# 321 B D HANGERS	1/2	25 80 DZ	8 60
PLUS PREPAID FREIGHT PER ATTACHED RECEIPT				4 50
CARTAGE				1 40
PACKING				20

193.34

*Received &
Certified Correct
S. J. Wickens Principal*

OCT 26 1945

INDIAN RESIDENTIAL SCHOOL
ALERT BAY, B. C.

DO NOT RETURN GOODS WITHOUT FIRST RECEIVING OUR PERMISSION. PHONE OR WRITE CLAIMS DEPARTMENT, GIVING NUMBER AND DATE OF INVOICE. ALL CLAIMS MUST BE MADE WITHIN FIVE DAYS AFTER RECEIPT OF GOODS. OUR RESPONSIBILITY ENDS WHEN THE GOODS ARE RECEIVED FOR BY THE TRANSPORTATION COMPANY.

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

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CANADA

POOR-COPY

DEPARTMENT OF MINES AND RESOURCES

Purchase Order

Nº 19634 A

Gordon & Belyea Ltd.,
101 Powell St.,
Vancouver, B.C.

P.O. Box 70,
Vancouver, B.C., Oct. 3rd 1945.

THIS NUMBER TO BE SHOWN ON ALL PACKAGES AND INVOICES

Please forward the following materials to the address given below, and charge to the account of the Department of Mines and Resources.

Render a separate invoice for each order and send 3 copies to M. S. Todd, Esq., Indian Agent, Alert Bay, B.C. together with prepaid freight bill marked "PAID" when goods are shipped.

Quantity	DESCRIPTION	UNIT	TOTAL
For rebuilding playery and machine shed at the Alert Bay Indian Res. School			
3 kegs	2 1/2" C. W. Nails.	5.21	15 63
2 "	4" "	5.06	10 12
20 lbs.	7" "	5.25	1 05
20 "	1-1/8 x 15 ga. Blued Shingle Nails.	7.21	1 44
30 gal.	Outside Gray Paint, International 5's	2.80	84 00
10 "	" White "	2.80	28 00
10 "	Red Shingle Paint "Cedarkote"	2.00	20 00
8 only	10' lens. #31 B.D. Track	ft. .23	18 40
4 prs.	32 B.D. Hangers	ds. prs 25.60	8 60
			<u>\$187 84</u>

Plus freight and cartage:.....

Prices F.O.B. Whee. Vancouver as per your tender of 14th Sept./45.

Shipping Instructions: SHIP BY PREPAID FREIGHT TO: REV. S. J. Wickens, Principal, Alert Bay Indian Res. School, Alert Bay, B.C.

Chargeable to Appropriation: INDIAN EDUCATION.
for.....
Vote: 76 Primary 10-691.
Encumbrance No.....
Copy for Head of Branch

Date to be delivered: AS SOON AS POSSIBLE.
[Signature]
D. M. MacKay (Issuing Officer)
Indian Commissioner for B.C.

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

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DEPARTMENT OF MINES AND RESOURCES

FORM No. I.A. 506A

INDIAN AFFAIRS BRANCH

TREASURY ONLY

CHEQUE No.....

DATE.....

1945-1946

Pay to..... **Patterson Boiler Works Ltd.,**.....Address..... **736 Alexander St.,**.......... **Vancouver, B. C.**.....

DATE	SERVICE	AMOUNT
1945 Sept. 5	To repairing and testing Hot Water Heater used in St. Michael's Indian Residential School, Alert Bay, as per invoices attached:-	\$75.79
	RECOMMENDED <i>[Signature]</i> Indian Commissioner for B. C.	

875-26-09622
TRIPPLICATE FOR FILE
11-10-45
Voucher in duplicate detached
for Accountant to Nav.

I HEREBY CERTIFY that this Voucher is correct, that the material has been supplied, the work performed and that the charges are fair and just, also that the expenditure has been incurred legitimately and that each item of the same is a fair and just charge against the Government of Canada. This expenditure was authorized by Departmental Letter, File No. *116-0-1* dated *Sept. 28/45*.

VOUCHER No. **164**DATE **Sept. 28/45** *MS Zeeu* Agent

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

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POOR-COPY

PHONE HASTINGS 0935

736 ALEXANDER STREET
VANCOUVER, B. C. Sept. 5th, 1945.

M. Department of Indian Affairs,

St. Michaels School Alert Bay, B.C.

IN ACCOUNT
WITH

PATTERSON BOILER WORKS LTD.
BOILERMAKERS

OUR INVOICE No 6271-6307

INVOICE No. 1252

ELECTRIC WELDING, BLACKSMITHING, TANKS, STACKS, ETC.
GENERAL STEEL AND IRON WORK

REPAIRS A SPECIALTY

ESTIMATES GIVEN

To removing and replacing tubes in hot water heater
and testing same

3-seamless steel boiler tubes 3" cut	10.70		
Labour boilermaker	41.00		
	<u>51.70</u>		
Sales Tax 8% on 10.70	.86		
		52.56	
Freight to and from Alert Bay		10.92	
Cartage " " " C.P.R. wharf		<u>5.50</u>	68.98
1-shaking grate bar for hot water heater	5.80		
Sales tax 8%	.46	6.26	
Prepaid freight to Alert Bay		<u>.55</u>	6.81
			<u>\$75.79</u>

Freight and cartage receipts attached

Verified Correct

S. J. Wicks

Principal

Indian Affairs. (RG 10, Volume 6428, file 875-5, part 9)

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