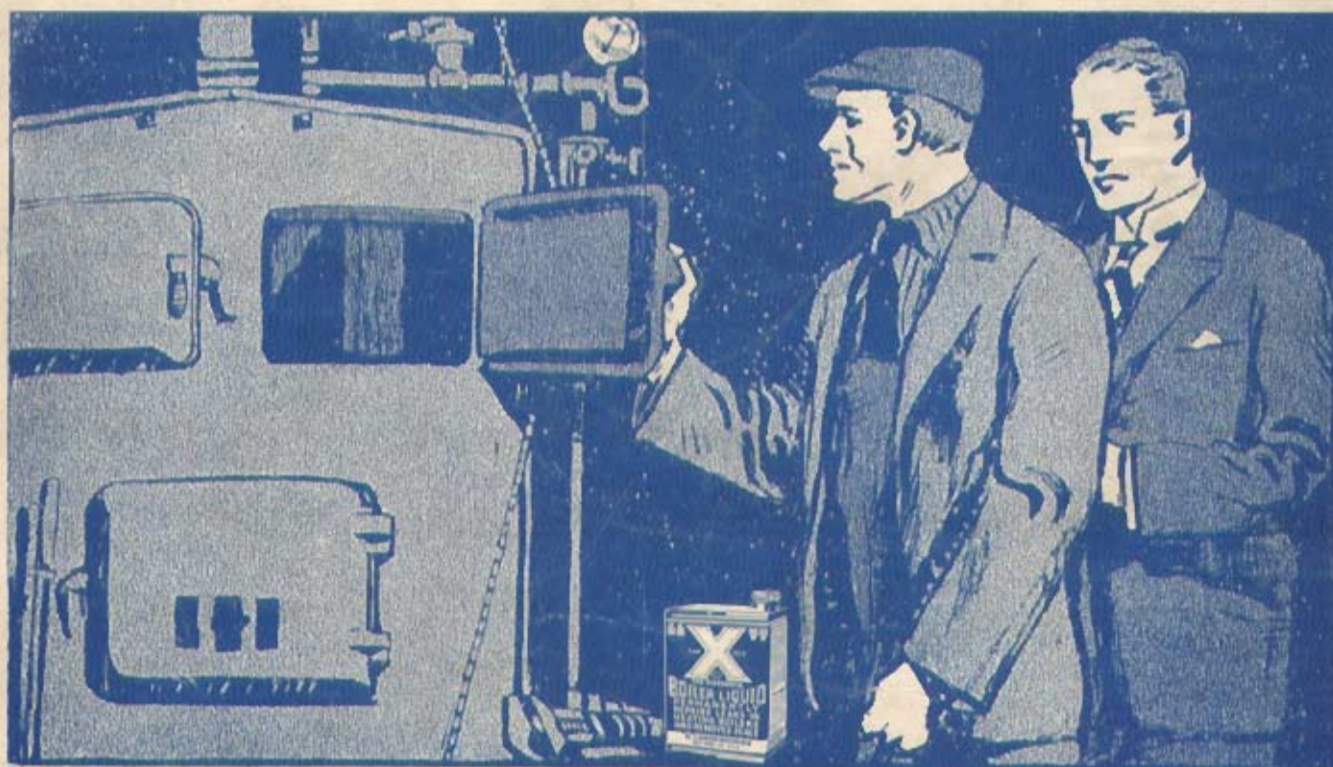


PLUMBER *and* STEAM FITTER

VOL. XCV, No. 12
\$2.00 a Year, 10 cents a copy

JUNE 17, 1921

Published Bi-weekly at Cooperstown, N. Y.
New York Office, 15 East 40th Street



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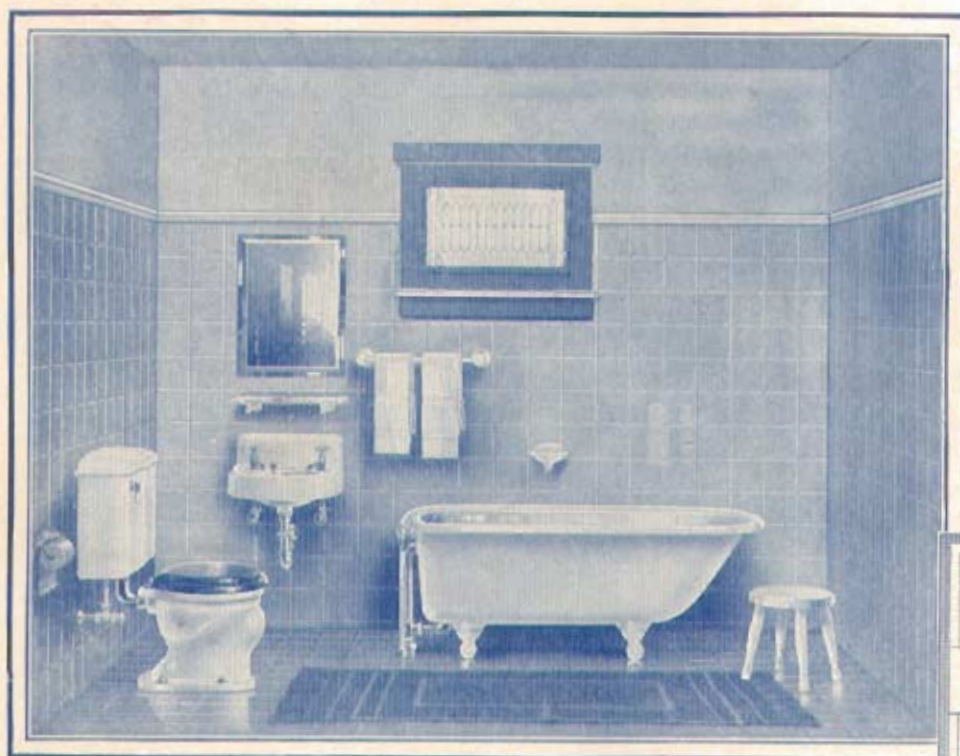
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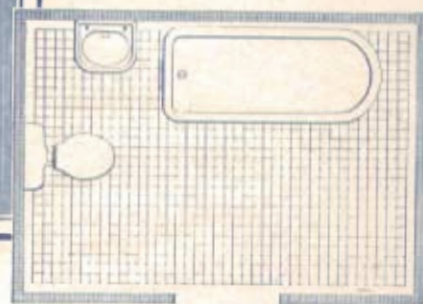
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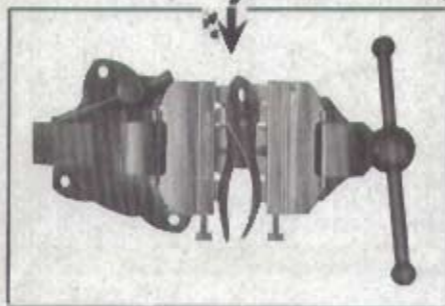


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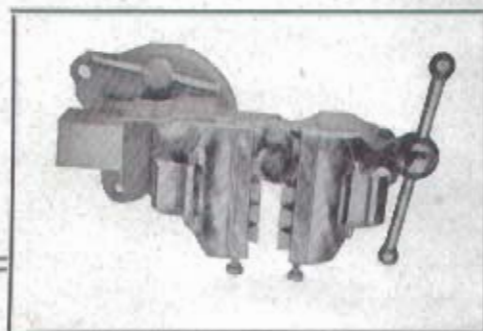
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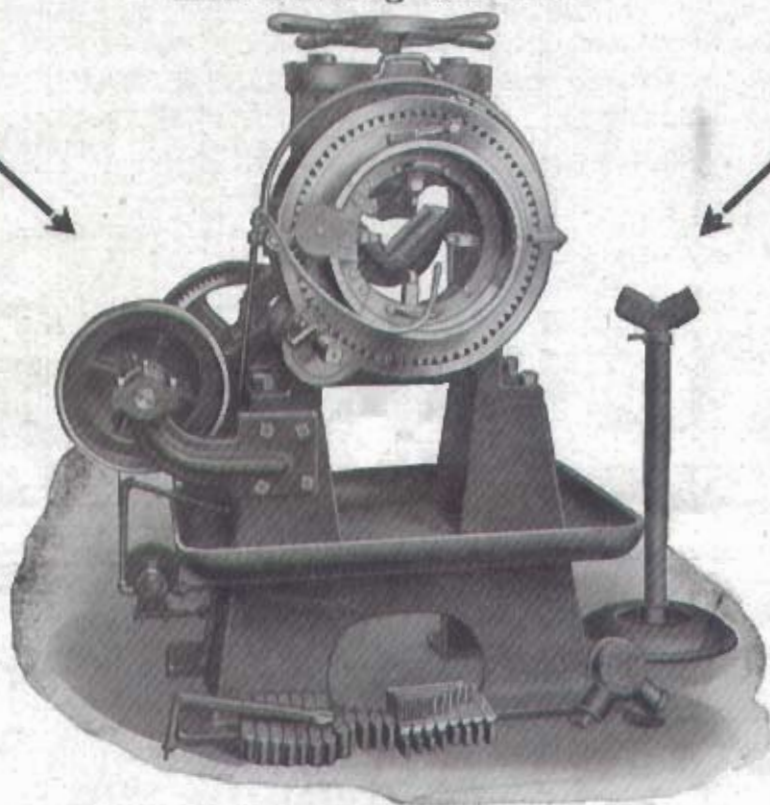
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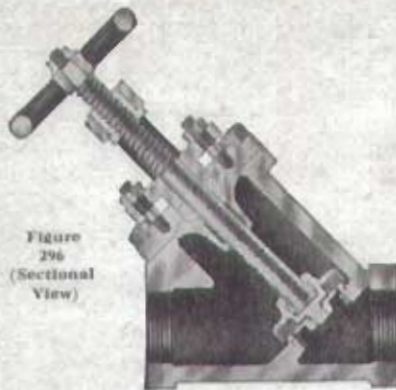


Figure 296
(Sectional View)

JENKINS BROS.

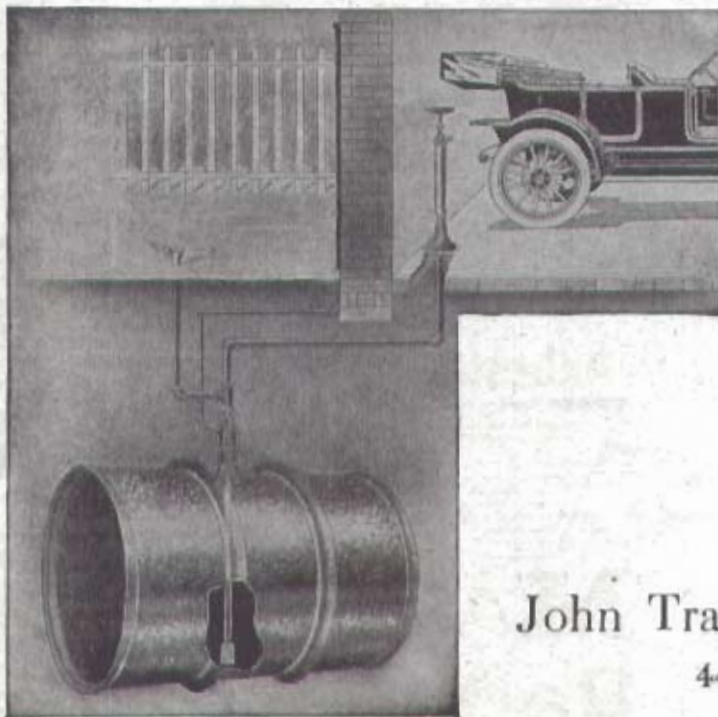
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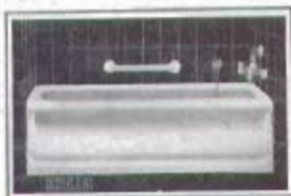
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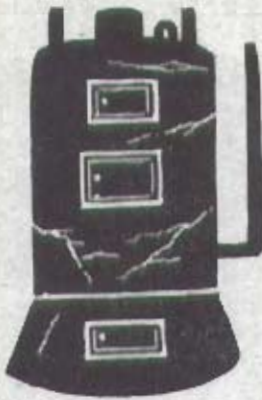
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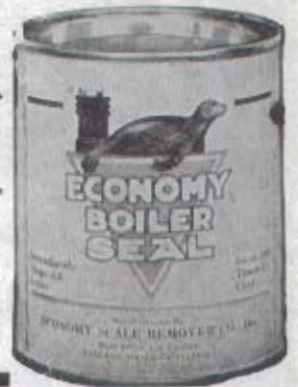


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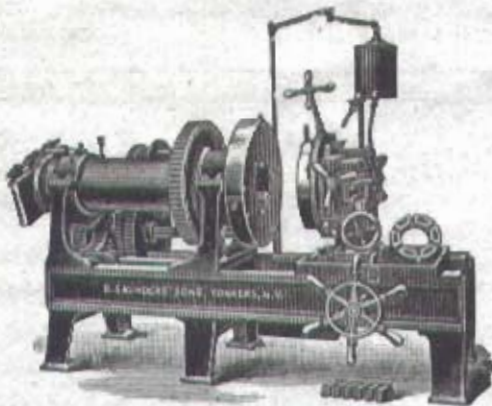


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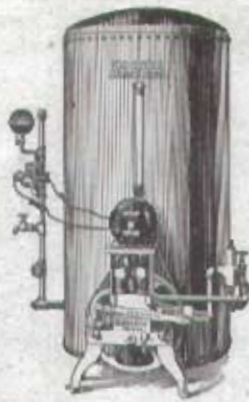
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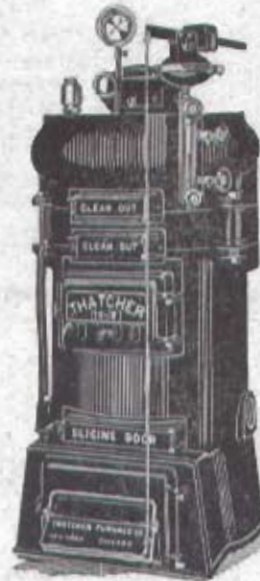
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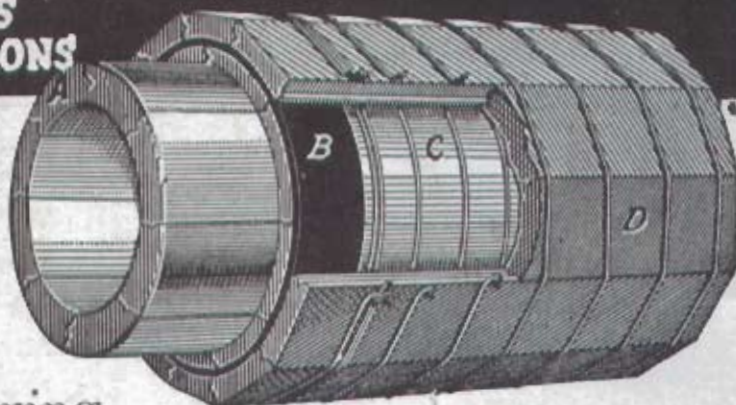
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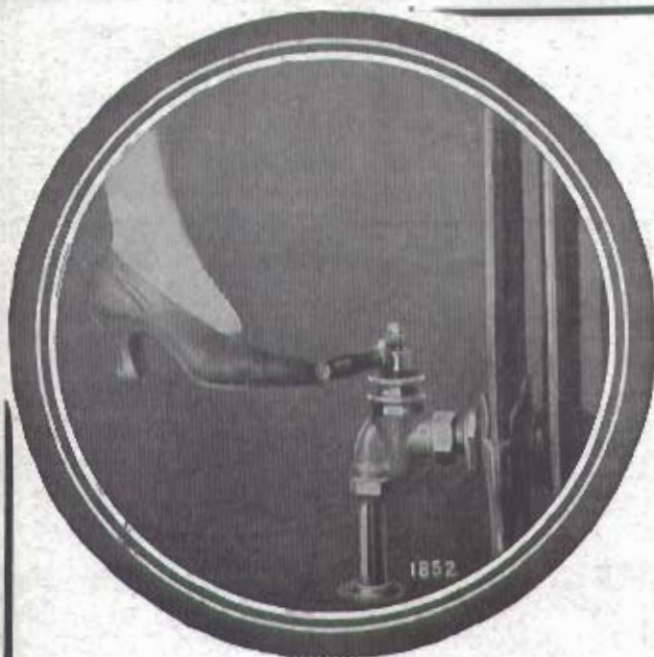
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PLUMBER *and* STEAM FITTER

Vol. XCV,

June 17, 1921

No. 12

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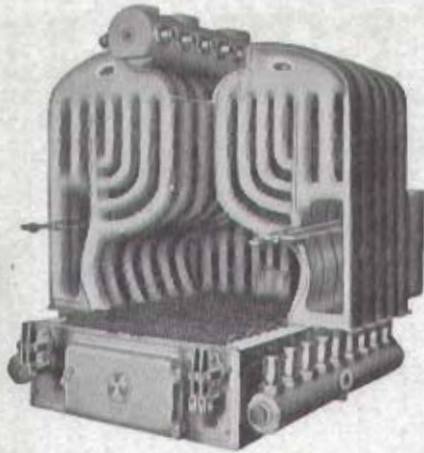
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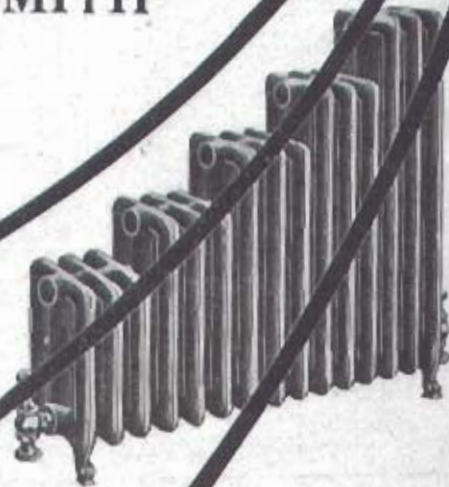
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PLUMBER *and* STEAM FITTER

Vol. XCV, No. 12

JUNE 17, 1921

\$2.00 a Year

Plumbing Fittings in the English Apartment House

The Idea of Central Heater to Provide Hot Water for Domestic Supply
of Several Apartment Houses Popular in England at This Time

The apartment house, or as we call it in this country, the tenement house, is very popular all over England. In large towns and even in the suburbs these long terraces of flattened houses are erected by thousands throughout the country.

These houses vary in size from two up to ten apartments according to the locality.

The two-apartment houses are generally arranged three on a flat and these houses have the usual sink in the kitchen and very often the W. C. arrangement is on the landing, by which you enter the house. So practically speaking, the W. C. stack is on the back wall of the building, one on each floor or on the mid landing if the stair to each floor is arranged in two flights.

The better class of two-apartment houses erected recently, have their own bath room with wash basin and W. C. Of course, houses with this accommodation demand at least 20 per cent higher rent so that after all the inclusion of this small bath with the necessary fittings is quite a good investment for the proprietor.

Three-apartment houses and upwards are fitted with bath rooms having hot and cold water. A typical plan of the four-apartment house is shown in the line drawing in which two such apartments are arranged on the one floor.

The access to each house is generally in the middle of the block and the common staircase goes right up to the top floor. The plan of each house is practically the same except in the right hand house on the ground floor a portion has been cut off one of the rooms to allow for the close entrance. In this way the bath rooms are the one over the other so that the soil pipe and waste pipes are just a continuation from the top floor to the drain.

Soil wastes and bath, basin and sink wastes are collected separately in this country, which of course means a multiplicity of pipes on the outside of building which

is no doubt an architectural misfortune. But by skillful planning these are placed in retired positions so that they do not obtrude themselves upon the sight.

In the early days of water closets the soil pipe was very often built into the walls of the house, but today internal soil pipes are forbidden almost throughout the length and breadth of England. External soil pipes have undoubtedly certain disadvantages, chief of which is the liability to injury from frost. But on the other hand they are constantly open to inspection and all the joints between W. C. and the drain, with the exception of the joint at the outgo of the closet, are outside of the building, so that the danger of air pollution within the house is reduced to the lowest possible limit.

The size of the soil pipe for a W. C. stack as shown is 4 in. of heavy cast iron. This is connected up to the drain without any trap because the provisions of an additional trap between

the closet and the drain is not an unmixed blessing, as it will frequently return foul matter and give rise to more or less unpleasant emanations.

Of course there is this to be said of a soil pipe properly trapped from the drain, it is impossible for it to carry air drain into the house, as the soil pipe, being open at both ends, will always have a fresh current of air passing through it.

But the foot ventilation of a soil pipe more than counterbalances this advantage because whenever a closet is used, a certain amount of vitiated air will necessarily be driven out at the open end of the soil pipe, which in many cases would prove a nuisance.

In the waste stack the bath and basin run into one waste pipe which in this case also collects the rain water from the roof. The waste pipe is also of iron of a lighter metal and is carried up full size to above the eaves of the roof as a ventilation pipe.

In linking up the waste pipes with the drain the two

One deeply interested in his particular trade is always keenly alive to the advantage of storing up additional knowledge regarding it whenever possible. Practices and customs in every line of trade vary in the different countries, and much interesting information for the plumbing and heating contractor is given here about the methods employed in England in the installation of plumbing fixtures.

wastes are taken forward to a point beyond where before this part of the drain is linked up with the soil drain, a disconnecting trap is put in. In this way a fresh current of air is always passing up the two vertical waste pipes.

The soil drain from the two sides of the house are made to meet opposite the back entrance and are from there taken through the closet to meet the sewer which in most cases passes along the front of these houses.

The drain is disconnected from the sewer just before it is linked up on the front so that the supply of fresh air from the disconnecting trap causes a current of air to pass along the soil drain and up the soil pipe, which acts as a ventilation pipe for the drainage on each side of these apartment houses.

In planning an English bath room the idea of having the W. C. waste and the bath waste separate very often causes these fittings to be on different sides of the apartment. In England a W. C. basin must be against an external wall so that the typical arrangement is to have the W. C. in the window bossing and the basin and bath along the long side of the room. The hot water towel rail is then fitted up on the wall opposite the bath if the apartment has such a luxury.

DOMESTIC HOT WATER SUPPLY

The prevailing idea for the hot-water supply to apartment houses is at the present time to have it done from a central heater. This is taking place in a great many ranges of apartment houses. They are having built outside of the block of houses a small underground apartment in the charge of the caretaker, into which the boiler is set so that all the stoking for as many as seven of such buildings is done from the boiler house. Of course each block of houses will have its own circulating tank which will store sufficient hot water for the momentary needs of the householders.

The difficulty of this arrangement is that it only holds good so long as the range of tenement remain the property of one company, for immediately on the sale of one or the other, this wholesale idea of supply hot water becomes somewhat disarranged.

A better idea is for each block to have its own heater for hot water and, where this has been adopted in England, the hot water boiler is in the basement of the tenement. One caretaker can quite well look after a few of these boiler houses. The arrangement for such an installation is shown in the line drawing.

One circulating tank serves three houses, which means that there must be a free circulation between each of the circulating tanks and the boiler in the basement. From the top of the tank is taken the supply pipe to each of the bath rooms and the kitchen sink.

ADVANTAGE OF CENTRAL HEATING SYSTEM

This system has the great advantage that where the houses are under the charge of a caretaker, the one fire supplies the hot water for six apartment houses. Where so many of such houses are being fitted up with gas fires and gas cookers, it is very handy to be able to draw hot water without having all the trouble of warming it.

How far the fitting up of those apartment blocks with central hot water supply systems will go, it is difficult to say, because recently there has been a tendency for such blocks of houses to be sold in semi-flats. That is, householders are purchasing their own three or four apartment house, so that if the idea of selling an eight apartment block to eight tenants is to continue, there is just a chance of central hot water systems being knocked in the head, when no doubt a separate system for each house will be used.

This has for long been the idea of supplying hot water to householders all over England and where a coal fire is used in the kitchen, it has been somewhat successful. The scarcity of coal has caused the wasteful tendency of the kitchen range with its hot water boiler behind the fire to be made the most of.

But, after all if the English public are going to adopt the principle of buying flatted houses where they are built in large blocks, there seems nothing else than that central hot water supply systems will have to take a back seat.

Hot water supply systems, as shown in the drawing, will become the systems again and the question of whether gas or coal will become the heating medium remains a somewhat open question.

Political Religion of Nation

Let every American, every lover of liberty, every well-wisher of his posterity, swear by the blood of the Revolution never to violate in the least particular the laws of the country and never to tolerate their violation. * * * Let every man remember that to violate the law is to trample on the blood of his father and to tear the charter of his own and his children's liberty. Let reverence for the laws be breathed by every American mother to the lisping babe that prattles on her lap; let it be taught in schools, in seminaries, and in colleges, let it be written in primers, spelling books and in almanacs, let it be preached from the pulpit, proclaimed in legislative halls and enforced in courts of justice. And in short, let it become the political religion of the nation.—*Lincoln*.

The Studimeter

What difficulties were encountered in laying the pipes for the oil line in deep water? 329

How was the pipe for the large oil line laid in Lake Champlain? 329

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How can the plumbing and heating contractor secure the greatest benefit for his business from manufacturers' national advertising campaigns? 332

What suggestion is made for using manufacturers' selling points in local advertising? 333

Why should the small losses occurring frequently through the use of poor tools or lack of tools be eliminated? 334

How many and what size wrenches should a vise have to do efficient work economically? 334

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What are the principles of operation of the wheel, the inclined plane and the screw? 338

How was the Durant Hotel, Flint, Mich., equipped to insure efficient ventilation? 340

What is the plumbing situation in Wisconsin at this time? 341

Accurate Plumbing and Heating Estimates—How Made

Explaining Method of Distributing Subordinate Labor Charges Thereby Setting Up Detailed Costs

BY HARVEY A. CALL

PART VII

As a concrete example of applying this system let us take the job on which we have taken off quantities. For the purpose of calculating the distribution of subordinate work, let us assume that the men in actual practice have taken 12 hr. to erect the soil stack less vent and waste lines.

Further let us assume that an elementary time study of the various items in the field shows that it takes 1 hr. to make a wiped joint, 15 min. to place the flashing, 5 min. to make a 4-in. soil pipe cut, 12 min. to make a 4-in. caulked joint, easy, 15 min. for a caulked joint, average, 12 min. for 2-in. caulk joint average 25 min. for a 4-in. caulked joint, difficult and 15 min. for a 2-in. caulked joint, difficult. (The changes are used in this example are purposely made in arbitrary manner for reason before given.)

We would then have an example like this, the quantities being taken from the work sheet:—

8—4 in. soil pipe cuts	at 5 min. =	40 min.
24—4 in. " " joints, easy	" 12 " =	288 "
1—4 in. " " " average	" 15 " =	15 "
1—2 in. " " " "	" 12 " =	12 "
6—4 in. " " " difficult	" 25 " =	150 "
2—2 in. " " " "	" 15 " =	30 "
1—wiped joint	" 60 " =	60 "
1—4 in. flashing	" 15 " =	15 "
		610 min.

In this example we allow 5 min. for the actual operation of cutting the soil pipe, likewise, 12 min. for the actual work of caulking a 4-in. joint, easy (that includes yarning, running and caulking), 15 min. for a 4-in. average joint, and so on through the list, all of which are based on average lengths of time taken to do the actual work.

In this way we get the results that the actual work has taken 610 min. and it took the men 12 hr. in actual practice or 720 min. to do the work, the difference between 12 hr. and 610 min. that is the 610 min. subtracted from the 720 min. or 12 hr. gives us 110 min. which is the time taken up by the subordinate work.

This (110 min. item) must be distributed over the soil pipe cuts and caulked joints, because as previously explained, those two groups make necessary the subordinate work and predetermine the amount, and therefore can be consistently charged within cost.

This, then, gives us the problem to distribute the 110 min. into—

8—4 in. soil pipe cuts	
24—4 in. " " caulked joints, easy	
1—4 in. " " " " average	
1—2 in. " " " " "	
6—4 in. " " " " difficult	
2—2 in. " " " " "	

in such a manner that the cuts will carry 50 per cent of the subordinate labor, joints, easy—10 per cent of

the subordinate labor, joints, average—15 per cent of the subordinate labor and joints, difficult, 25 per cent of the subordinate labor.

No man can know whether his methods are best, until he knows his costs accurately. In almost every case more money can be made and better service given through careful, systematic and thorough reckoning of costs.

The first step in solving this problem would be to reduce the quantities of the soil pipe cuts to equivalents. For instance, in comparing the relative proportions, we see that cuts carry five times, caulked joints, average, one and one-half times, and caulked joints, difficult, two and one-half times as much subordinate labor as does the caulked joints, easy. Then caulked joints, easy, will be the unit of standard in equalizing values and quantities of other items can be standardized to proportionate values.

Then to continue with the solution of the problem—we would take the 24—4-in. caulked joints, easy, as the

first item, as the caulked joint, easy, is the unit of standard and would therefore, remain unchanged. Next we have the 8—4-in. cuts, each taking five times the labor of joints, easy, and this reduced to equivalent values of joints, easy, would be five times eight or forty. In the same way, we would multiply 2 caulked joints, average, by one and one-half giving three and the 8 joints, difficult by two and one-half, giving twenty. We would then have as our example:—

Caulked joints, easy	24	=	24
Cuts	8 x 5	=	40
Caulked joints, average	2 x 1½	=	3
" " difficult	8 x 2½	=	20
			87

Then the proportionate unit of charge will be 110 divided by 87 or 1.264, the subordinate charge to the various items made by multiplying the equalized value by the proportionate unit of charge as follows:

Cuts	40 x 1.264	50.58
Joints E—	24 x 1.264	30.34
" A—	3 x 1.264	3.79
" D—	20 x 1.264	25.29
		110.00

A summary of this analysis would be as follows:—

Item	Size	Quantity	Time Study Rate	Total Time Study Charge	Total Subordinate Charge	Total Actual Charge—Time Study plus Subordinate Charge	Subordinate Rate	Actual Rate
Cuts	4"	8	5	40	50.58	906	6.52	11.32
Joints E	4"	24	12	288	30.34	318.34	1.264	13.27
Joints A	4"	1	15	15	6.1	16.9	1.9	16.9
Joints A	2	1	12	12	1.9	13.9	1.9	13.9
Joints D	4	6	25	150	18.97	168.98	3.12	28.12
Joints D	2	2	15	30	6.33	36.33	3.12	18.17

- (a) Item taken from work sheet.
- (b) Size taken from work sheet.
- (c) Quantity taken from work sheet.
- (d) Time study rate taken from actual observation in field.
- (e) Total time study charge arrived at by multiplying quantity times time study rate.
- (f) Total subordinate charge arrived at by multiplying equalized values by proportionate unit of charge.
- (g) Total actual charge arrived at by adding total time charge and total subordinate charge.
- (h) Subordinate rate arrived at by dividing total subordinate charge by quantity.
- (i) Actual rate arrived at by dividing total, actual charge by quantity.

The actual charges are here shown in minutes, and for convenience they should be reduced to dollars and cents as against the prevalent scale of wages for men and helper as obtaining in the territory where being used. Figured against a scale of \$8.00 per day for mechanic and \$4.80 for helper, we would have mechanic at 1.67 cents per minute and helper at 1 cent per minute equals 2.67 cents per minute for man and helper. This would give us as rate for:—

Cuts	4 in. —	11.32 minutes	@ 2.67 =	31 cents
Joints, Easy	4 in. —	13.27 "	@ 2.67 =	35 "
" Average	4 in. —	16.9 "	@ 2.67 =	46 "
" "	2 in. —	13.9 "	@ 2.67 =	38 "
" Difficult	4 in. —	28.12 "	@ 2.67 =	75 "
" "	2 in. —	18.17 "	@ 2.67 =	49 "

The second classification includes all wrought iron and steel pipe work, therefore, iron waste, vent and water lines. The labor of installing this type of work can be classified under eight general headings.

- 1—Measurements are to be taken.
- 2—Pipe is cut.
- 3—Threads are cut.
- 4—Threads are painted.
- 5—Fittings are made on and vised.
- 6—Pipe-fittings-tools are carried to proper points in building.
- 7—Pipe is made up into line.
- 8—Hangers are put up.

Those classifications cover practically all work that is done in the erection of water, waste or vent lines.

As was done in getting the soil pipe items down to useful form, it will be necessary to apply a similar process of elimination to this group.

Take item 8—Hangers are put up. The hanger carries its own time charge, as previously explained in the first classification. While the hanger for soil pipe is of a different type and probably takes more time in most instances to apply, hangers under either classification will carry a direct labor charge, which can be easily arrived at and which is very accurate. This then eliminates item 8 from further consideration, as far as any subordinate labor is concerned.

The complete analysis for the 12 hr. labor actually put in this work by the workmen would show as follows:—

Item	Size	Quantities	Time Study Rate	Subordinate Rate	Actual Rate	Actual Rate Cost	Total Cost
Cuts	4"	8	5	6.32	11.32	31	2.48
Joints, Easy	4"	24	12	1.264	13.27	35	8.40
Joints, Average	4"	1	15	1.9	16.9	46	46
Joints, Average	2"	1	12	1.9	13.9	38	38
Joints, Difficult	4"	6	25	3.12	28.12	75	4.50
Joints Difficult	4"	2	15	3.12	18.17	49	98
Wiped Joint	4"	1	60		09	1.60	1.60
Flashings	2"	1	15		51	40	40
							19.20

We will next take up item 3—Threads are cut. That is a simple charge, as when the pipe is cut the men or man is at bench, tools are there, and if he doesn't loaf, he will cut the threads on the same sized pipe in practically the same length of time for each thread. An average of time taken for ten or fifteen of these threads will give a very accurate record, as to the cost of this work. Therefore, to establish the cost of cutting threads, it will be but necessary to make an elementary time study of this item under normal conditions, and this can be used as the rate to be charged against this item.

Taking up items 4 and 5—Threads are painted and fittings made on at vise—we again have the materials, tools and men assembled at that point ready to proceed with the work. This is true, as it is the customary practice of the workmen when cutting the thread to make on any necessary fittings before the pipe is removed from vise. This practice not only allows of making the fitting on in a very firm way, but materially speeds up the work. The painting of the threads of the pipe is but a small item, taking but very little time, therefore, can be included with the making on of the fitting. This item will be listed in the labor charges as make-up, easy, and all fittings made on pipe at vise will come under this head.

Further, it will be seen that the amount of time taken to make on any particular type of fitting, for instance, an elbow or coupling or tee of a 1-in. size, should not vary to any great degree. Occasionally there is a burned thread, however, if there are many such, something is wrong with the fittings, or threading machinery, which should be remedied at once, otherwise, one 2-in. fitting, for instance should be made on as quickly as the next 2-in fitting.

An average of time taken in making on ten or more of these make-ups in any size of fittings will therefore give a very reasonable labor charge for make-up for that size pipe when the fittings are made on pipe at vise. Further, in performing these make-ups there is no amount of subordinate labor created, or necessary, as practically in every instance the tools, fittings and pipe are all at vise and it is just simply a matter of the time taken to pick up the fitting and make it on. Therefore this item will not carry any additional charge for subordinate labor.

Experience has shown it is most practical to base threads and make-ups, easy, labor charges on the average time taken, the mechanic and helper both being at the vise. Although there are various opinions as to the most efficient method to work men, when it simmers down to actual efficiency, results tend to show that when the helper does all the cutting and threading, there is an actual loss of time which brings the progress of work back to the same rate as though both mechanic and helper went to the vise with three or four measurements and made the cuts, threaded them and then returned to make them in line.

(To Be Continued)

Be a Leader

"Follow the Leader" is quite an amusing game, but the average intelligent person would soon tire of it, if played continually for any length of time. So it is in business, the leader is the one who plays the most interesting game. You will never get ahead by simply following another. Use your own ability to make of yourself a leader.

Achievements of the Trade Extension Bureau

Excerpts from the Report of W. J. Woolley, Manager of the National Trade Extension Bureau, Delivered before Convention of National Association of Master Plumbers at New Orleans, June 8

When the new born babe, Trade Extension Bureau, was ushered into your convention at Atlantic City, 2 years ago, there were a great many who did not believe the child would ever learn to crawl, much less to walk, but there were a sufficient number present who had confidence in any project that the National Association of Master Plumbers might foster to adopt the movement, and the child was taken into the family.

For years we have heard a great deal of detrimental things about the members of our craft. We have been cussed and discussed by outsiders, condemned and damned by our own clan, and we have been accused of being so blind that we would not see, so deaf we would not hear, and of having no use for our heads except for hat racks.

These statements have all been founded or created because of ignorance and misunderstanding. The plumbing and heating contractor has not been understood, or his services appreciated because the public has not been properly informed.

During the past each member of the trade has been forced to work out his own problems as individual because there was no place for him to turn for assistance. He was not blest with the same business training as other business men. Therefore he had no way of knowing the fundamentals that are so essential in the operation of a business. He had to rely entirely upon that which he picked from experience. In a sense he had nothing to follow except established custom and this, of course, kept him far in the rear of modern business. Established custom in every business has constantly changed during the past years until today business cannot be operated along the same lines employed in the past. We must meet the new order of things.

IMPORTANCE OF ADVERTISING

This industry has been very lax, or I might say backward, in using advertising mediums through which the public could be properly informed and enlightened as to the real value and worth of the services sold by the plumbing and heating contractor. I am quite sure that you will agree that too small a sum of money is spent each year in advertising plumbing. I am equally sure that you will agree that if more money were spent in advertising, the public press of this country would not dare run or use the many degrading articles and cartoons that appear from time to time and which do this industry much injury. Instead we would have more editorials like the one appearing in yesterday's paper.

The educational work among the members of the craft has been much neglected in the past, and even the limited amount that the state and national organizations were able to do, on their limited income, was not of a lasting nature, because it could not be properly followed up.

To-day the National Association is providing for its members and for those on the outside through the Trade Extension Bureau, a service that will unquestionably bring the plumbing industry up to as high a standard in every community as any other line of business, and that day is not far distant, judging from the

way the plumbing and heating contractor has taken hold of and put into execution the services rendered by T. E. B. Perhaps a few figures will give you a better idea of what we have been doing for the trade and how the trade is taking advantage of the services rendered, all of which positively proves that the plumbing and heating contractor is not deaf or blind to opportunities, but instead is willing and anxious to apply modern business methods to his business as fast as ideas and plans can be conveyed to him.

DUTIES OF T. E. B. FIELD MEN

During the past year our field men have visited 300 cities, calling upon the trade, for the purpose of interesting them in our work. It was their duty to address evening gatherings of local associations on business subjects. The services of these men have unquestionably proven valuable in assisting the local officers, as well as the state officers in organization work, and have been the missionaries of both this association and the Bureau in every locality in which they have worked. While it is true that these men have not been as forceful as we should like them to have been, you must remember they are doing a new work, have a hard job to fill, which necessarily requires experience. Therefore be patient with them as well as with us.

In the latter part of last year, following a request made by many local associations, for material that could be used at their meetings during the educational hour in the absence of an adequate field force, the Bureau prepared what we have termed "The T. E. B. Lecture Course" for associated bodies of plumbing and heating contractors. I am very pleased to report that these lectures have been received by the trade with far greater enthusiasm than we could have hoped for, and the latest reports indicate that at least 306 local associations are giving these lectures at regular intervals with an average attendance of 8,360. This means that at least four-fifths of the total membership of the National Association must be absorbing the food set out in these lectures.

From a standpoint of interest taken in this work, perhaps the following figures covering the receipt of mail at our office will give you some comprehension as to the volume of mail that is received by us daily from the trade.

During the past twelve months, we have received 10,280 letters from master plumbers, or an average of 40 letters per day. This does not include second class matter received, which amounted to 1442 pieces or more than 100 per month.

AMOUNT OF OUTGOING MAIL

The following figures covering the outgoing mail from our office will perhaps give you some idea of the volume of work we have to do.

During the last year we have sent out nearly 4,000 letters per month, or a total of over 46,000. In addition to this, we have sent out nearly 10,000 parcels post packages containing advertising service, forms of various kinds, and other material sold by the Bureau ex-

clusive of bookkeeping systems. That department has sold 290 complete bookkeeping systems of our No. 3 type, 160 No. 2's, and 130 of our No. 1's. This is exclusive of many hundreds of systems that have been revised by the Bureau, and where new systems were not needed by the plumbing and heating contractor.

This department has also sold and delivered to plumbing contractors 151,420 orders for different kinds of forms, published and distributed by us.

ACCOMPLISHMENT OF SALES HELP SERVICE DEPARTMENT

The Sales Help Service Department has also rendered its full share of service to the plumbing contractor as the following figures will indicate.

During the past year, we have supplied 159 contractors with complete plans for new show rooms. We have supplied 4098 contractors with advertising copy. This is exclusive of the "Bath in Every Home" campaign wherein we received 3500 orders for the copy produced in the broadside covering the "Bath In Every Home" campaign, alone.

This department has supplied 250 contractors with circular sales letter forms outside of the sales letters appearing regularly in the monthly bulletin.

I also desire to call your attention to the fact that many newspapers also are buying our service of matrices and cuts, so that they can give the plumbing and heating contractors in their locality direct service. As many as 36 newspapers have subscribed for our services regularly and are of course selling advertising to a great many contractors, which we know nothing about.

In addition to the above, 347 local associations are receiving our group advertising services which was developed for the general betterment of the business, and which many local associations have taken advantage of and used in the newspapers in their locality. While we have no definite records of just how many associations have used this copy, it is safe to assume that at least 100 or more have published the copy which we supplied them with. That is the reason that I feel safe in saying that during the past year we have encouraged the contractor either as an individual or through his association to spend more money in advertising than he has ever done before in any two years.

Aside from the above services, we have mailed out during the past twelve months 275,239 monthly service bulletins, or an average of over 23,000 per month.

SERVING APPROXIMATELY 25,000 CONTRACTORS

At this time I want to call your attention to the fact that when our appropriation was made the first of the year, it was based upon supplying not more than 15,000 contractors with our services. Our mailing list has however steadily increased until today we are supplying approximately 25,000 plumbing and heating contractors with our services. Thus you will understand why our office force has become burdened with duty, when we have taken on this great increase without having added to our force.

Besides this, we have supplied hundreds of plumbing and heating contractors with essays that could be read at local business clubs and which were prepared with a view of enlightening the business men of the country as to the services rendered by a plumbing and heating contractor, and in this way elevate the standing of the craft. We have also supplied numerous contractors with material which they could use in defending themselves in law suits.

At the present time, we are planning some new steps in Trade Extension work which I am quite sure you

will be pleased to learn about and which we believe will be the means of creating additional interest in our work. Of course, the success and extent of this venture will depend on our income, for all such activities cost money.

As an example: The state of Illinois, beginning with date of June 20 will conduct a series of zone meetings. These meetings will be held in cities centrally located within respective zones—and which are accessible to all of the men engaged in the business in that territory. These meetings will be purely educational and each of them will be attended by some person from the Bureau who will deliver educational talks and participate in debates that will take up the entire time allotted. These meetings will be held each week until the state has been covered.

Another plan to be followed is as follows:

In the city of Dayton, we have planned a sales building campaign of the broadest scope ever attempted in this industry. Beginning with the first of this present week, the Dayton local will run a quarter page ad prepared by T. E. B. in their local newspapers at regular intervals throughout June and July. We have made arrangements and have secured stenographers to get a complete list of the water users in Dayton, which will be cross indexed on cards for later use in a sales drive which will start early in July.

Beginning June 20, the Bureau will conduct a school in Dayton at which men and women solicitors will be trained to make house to house canvasses, soliciting and selling plumbing installations.

During the week of June 25, to July 2, or what will be known as "A Bath Every Day" week, every local merchant in Dayton, who sells anything from a tooth brush to a bath robe, will be solicited to put in special show windows, covering the subject of a "Bath Every Day" and to run special advertisements in the newspapers covering this subject.

MERCHANTS TO CO-OPERATE WITH PLUMBING TRADE

In other words, it is our intention to have the merchants co-operate with the plumbing trade in an effort to educate the public to bathe more frequently, thus requiring more plumbing facilities.

Between now and July 1, every master plumber in Dayton will supply his journeymen with premise report cards on which the journeymen will make a complete report of the condition of the plumbing in every building in which he works. This information will be used later in an effort to sell the homes and buildings of Dayton some much needed plumbing equipment.

Beginning with July 1, a house to house canvass will be instituted in order to prove that plumbing can be sold if the proper effort is put back of it.

In fact this drive in Dayton is but a forerunner to other campaigns which we will conduct in various cities throughout the United States if our finances will permit. We have selected Dayton because Dayton was ready and anxious to put on the campaigns and because Dayton has suffered a great deal from a business depression. It therefore makes an excellent city to use as a test, for if Dayton can be sold plumbing under present existing conditions, then plumbing can be sold by a similar plan anywhere in the United States.

I am sure that you will agree that many list prices in the past, appearing in catalogues, have been misleading. They have been so low that the contractor was not justified in pushing the line. Particularly was this true with higher grade wares. So much so in fact that a dealer would lose money on a transaction where he sold

(Continued on Page 397)

EDITORIAL COMMENT

Wages

For the past few months each day has brought its new disputes over wages—the price paid for labor. The plumbing and heating industry has, and is having, its share of such disputes, each contributing a loss to the industry and working its corresponding hardship on all immediately interested. It is very unfortunate, as each dispute ends in a win or a tie and a loss. The loss is always there, no matter how successful or sweeping the win, nor how even the draw. There is no panacea for the cure of this evil. However, it is commendable to see competing master plumbers and steam fitters locally standing shoulder to shoulder, whole heartedly supporting each other in a struggle for American principles as against Bolshevist greed or misconception. Unquestionably the journeymen and apprentices have rights. More than that, those rights obligate plumbing and heating contractors to study every phase of conditions and in every way to secure to the journeymen and apprentices a just and equitable compensation for their services. That compensation should be sufficiently large to allow of the mechanic and his dependents not only enjoying the necessities of life, but many of its luxuries. Plumbing and heating is absolutely essential to the health and happiness of mankind. It requires a considerable skill to install and entails heavy, hard and oftentimes disagreeable work for the mechanics. Their pay should be larger than that of most other trades. There is a moral obligation on the part of the plumbing and heating contractor to see that his men get the pay to which they are entitled. But—the journeyman must understand that thirty to sixty per cent efficiency breaks that obligation. It does not leave a corresponding thirty to sixty per cent obligation. The obligation is absolutely destroyed when the mechanic begins to lay down on his job. Also the mechanic must understand that losses incurred through his following agitators and Bolshevist leaders into protracted strikes, inevitably must be and is paid by him, no matter who wins. There is only one common meeting ground where all can win and enjoy the benefits to which they are entitled. That is the plane of justice and right, and on which both sides approach with a will to be fair. Men with honest intentions to be fair can always get together. The thing which is not fair, even though put over by one side or the other cannot be made to stick permanently, and will most surely return its full share of harm and injury, so that all suffer no matter who puts the unfair thing over. Every effort should be made to enlighten the mechanic as to the true state of conditions, and to discredit the work of agitators wherever possible.

Be a Booster

Be a booster! But don't confine all your boosting to your own backyard. Get out and boost the other fellow too. You will never remain long on a pedestal, from which you have pulled the other fellow in order to have plenty of room for yourself. There is more room at the top than lower down—plenty of room for the other fellow as well as yourself. Many a man loses a sale or a job through his "roasting" of the other fellow. In business life, as in every day life, it is a pretty safe plan never to say anything about any one unless it be something good. Fall in the ranks and boost the other fellow, yourself and your industry.

Courtesy

A soft answer turneth away wrath. Apply this to yourself when an irate customer berates you for a fault which is not yours. Wait until his anger has cooled, then approach him in a courteous manner and attempt to explain and remedy the cause of his anger. Almost any sane person is amenable to reason, and if one can present his side of the case in an agreeable, intelligent manner, nine times out of ten, he "comes out on top," and will have gained a friend as well as a customer. It is just as easy to be patient and polite as it is to be impatient and rude. Courtesy pays immense dividends and is accumulative in effect.

The Value of Mistakes

The man, be he a member of any profession or trade whatsoever, who lives in mortal and constant terror of making a mistake, is handicapped by a vital weakness. A well known writer has truthfully said, "The fellow who never makes a mistake never makes anything else worth a damn." There is a very definite and valuable relation between mistakes and progress. Through a mistake, many times, men have stumbled upon an invention or discovery which later proved of inestimable value to the world at large. An honest mistake can always be put to some use, even if it is only to make one more successful in guarding against future mistakes. But there is a vast difference between the laxity of a careless workman, and the honest and apparently unavoidable error made by his painstaking brother. The former is valueless, the latter, if properly corrected, a step forward in progress. Don't be afraid to make honest mistakes. But, what is equally important, do not fail to profit by them.

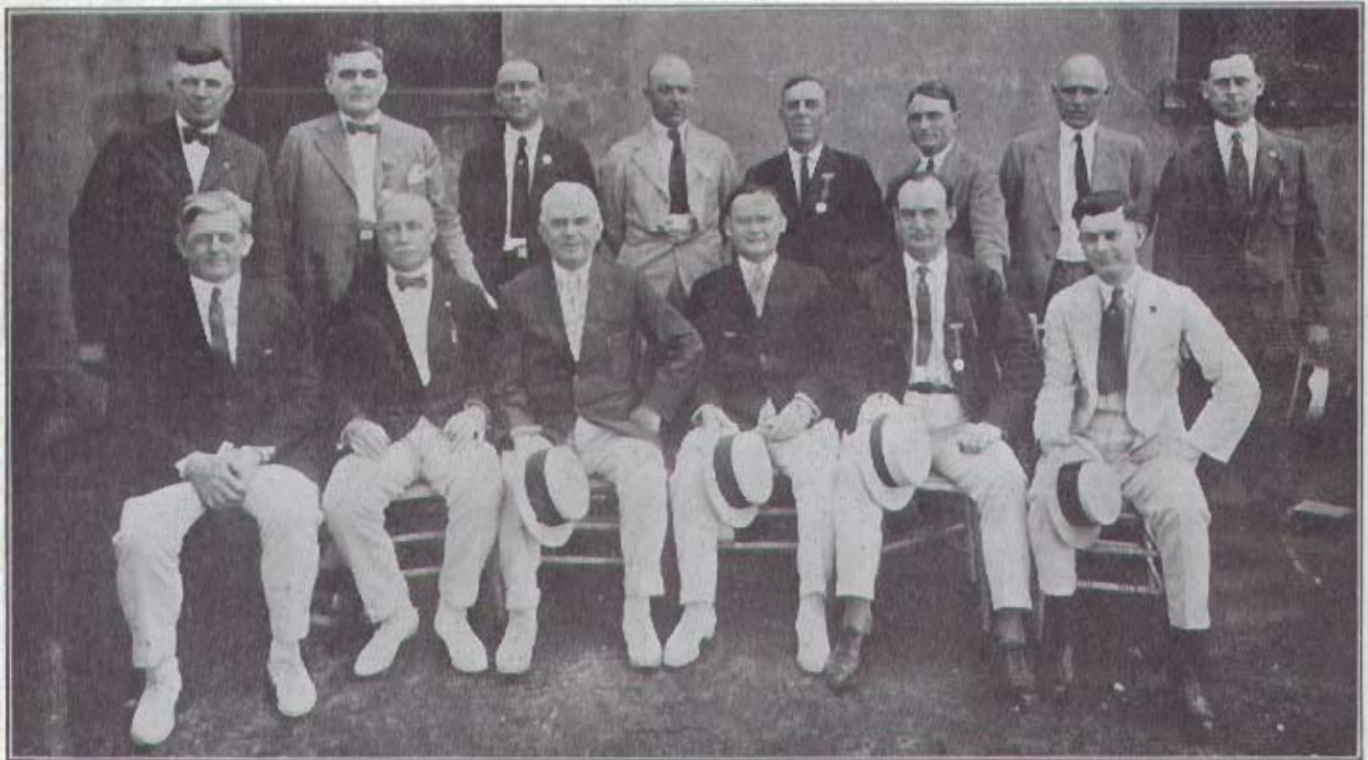
Convention of National Association of Master Plumbers

A Large and Enthusiastic Attendance and Wholesome Southern Hospitality as Exemplified by the New Orleans Association Contribute in Making the Thirty-ninth Annual Convention Most Successful

Under the guidance of President D. F. Durkin, Jr., the work of the thirty-ninth annual convention of the National Association of Master Plumbers, held in New Orleans, June 7, 8 and 9, was carried out with dispatch. The "New National Policy" was enthusiastically and unqualifiedly endorsed and every effort made to have all members made familiar with its terms, thereby acquainting them with its unlimited and unhampered opportunities. National Trade Extension Bureau work showed most commendable results and those responsible for its achievements given the approval of the conven-

Tuesday morning session was opened by President D. F. Durkin, invocation by the Reverend Max Hellar.

Andrew J. McShane, Mayor of New Orleans, then introduced, extended on behalf of the city a cordial and hearty welcome to the delegates and guests of the convention, mentioning that 21 years ago, the annual convention of the National Association of Master Plumbers was held in New Orleans and at that time the convention delegates present aided materially in expediting the plans for the installation of adequate sanitary water and sewerage system for the city, the result being that at



PAST AND PRESENT ASSOCIATION OFFICERS

Front row—National Director Frank B. Lasette, New York; Treasurer R. J. Welch, Lowell; Secretary George F. Uber, Philadelphia; Retiring President D. F. Durkin, Jr., Philadelphia; President-elect Joseph W. Cannon, Chicago, and Executive Clerk Whitaker, Philadelphia; Back row—National Director, W. W. Hughes, Minneapolis; Vice President-elect John S. Irvine, Detroit; National Directors Harry L. Hanson, Butte; Harry Farrell, Camden; Andrew F. Curtin, Boston; John J. Vogelwohl, Cincinnati; John Hokom, Los Angeles, and S. A. Tompkins, Charlotte.

tion and encouraged to further efforts in the shape of materially increased contributions from the association for next year.

Finances of the association, as reported by the treasurer, show an approximate balance of \$23,000 in hand after all convention bills are paid.

Apprenticeship problem, standardization and business conditions all received consideration and discussion.

Officers elected were: President, Joseph W. Cannon, Chicago; vice-president, John S. Irvine, Detroit; treasurer, Richard J. Welch, Lowell, Mass.; secretary, C. A. Dried, Chicago, Ill.

the present time New Orleans has a water and sewerage system equal to that of any other city in the Union.

Professor A. B. Dinwiddie, of Tulane University, on behalf of the Association of Commerce, extended further welcome to the delegates and guests and addressed the convention on "What Has Become of Business," stating that it was his belief that business must be reconstructed through sales efforts and that all must learn the lesson of "Give and Take," stressing the need of mutual confidence among business men as a body.

Hunter S. Charlton, president of the New Orleans Association, expressed the pleasure of the local associa-

tion in having the National Association as its guests, assuring all a hearty welcome and the earnest desire of the local to have everyone, on leaving the city, carry home pleasant memories of the time well spent. As indicative of the progress being made by the Local Association, Mr. Charlton stated that 2 years ago the association had but eight members, through absorbing an association of twelve members not affiliated with the National Association, plus an active campaign for new members, resulted in the Local Association now hav-



SOME ILLINOIS REPRESENTATIVES

Left to right, George B. Barron, W. J. Barber, Baton Rouge, Mr. and Mrs. Charles Alcock, President Chicago Local Association of Master Plumbers, Mr. and Mrs. George J. Dehn, Chicago

ing some eighty odd members, each and all of them live wires.

National Vice-president Joseph H. Cannon, of Chicago, responded for the National Association to the speeches of welcome, expressing appreciation of the southern hospitality and his pride in the National Association, which had done more than any other human agency, in perfecting systems of sanitation, thereby safeguarding the health of mankind.

President Durkin then announced the appointment of Committees as follows:

Sergeants-at-arms—J. A. Reynolds, New Orleans, and William Ambrose, of Philadelphia.

Credential Committee—A. A. Zertanna, St. Louis; Charles Alcock, Chicago; August Eidman, Baltimore; C. P. Tillman, Montana; C. S. Whitcomb, Oregon.

Resolutions Committee—James S. Cassidy, Massachusetts; Jeremiah A. Sheehan, Missouri; Harry J. Farrell, New Jersey; J. C. Naughton, Illinois; N. J. Kennedy, Michigan.

Auditing Committee—E. C. Eastham, Texas; J. Preston Perham, Mass.; Louis Frisse, New York; A. W. Webber, North Carolina.

Past Presidents Jeremiah Sheehan, of Missouri, William H. Doyle, Pennsylvania, P. N. Murphy, Illinois, E. C. Eynon, Ohio, Frank J. Fee, New York, Walter D. Nolan, D. C., James S. Cassidy, Mass., Frank B. Lasette, New York and L. McNamara, Missouri, on being introduced, responded with short and interesting reminiscences and expressions of pride in the accomplishments of the National Association.

William McCoach, the veteran association worker and past national treasurer, on being called upon by President Durkin, stated that he was present at the first meeting of the National Association and had attended

every annual convention since. (A truly remarkable example of loyalty to an industry, unselfish service to his fellow-men, and in a measure, accounting for the solid growth and many achievements of the National Association.)

The report of the Credential Committee then read by Chairman A. A. Zertanna, showed a quorum present, and the deliberations of the convention legal. On motion prevailing, the report of this committee was adopted as read and reported as the official roll call of the convention.

A letter was then read, extending the freedom of the Elks Club to delegates and guests, after which the meeting adjourned.

TUESDAY AFTERNOON

The session opened by President Durkin, who after making several announcements in reference to entertainment and transportation and receipts, proceeded to read his report which Vice-president Cannon announced as a very remarkable document and which in every sense lived up to its introduction. On motion by Mr. Cassidy of Mass., the report of the President was received and referred to the Resolution Committee for action on recommendation.

At this point, Mrs. E. D. Hornbrook, on being granted the privilege to address the meeting, stated that it was the desire of the National Ladies' Auxiliary, then in session, that the National Body express its opinion as to whether only the wives and daughters of plumbing contractors who maintain an established place of business and are regular members in good standing of The National Association of Master Plumbers, should be eligible to membership in the National Ladies' Auxiliary, or whether the privilege of membership should be extended to wives, daughters, mothers, sisters and nieces of such contractors. As information on this subject,



PART OF KANSAS CITY DELEGATION

Left to right, J. H. Phelps, Mrs. John C. Friel, Mrs. G. Beauland, H. W. Sivewright, Mrs. E. D. Hornbrook, A. M. Chasteen and D. E. Justice

Mrs. Hornbrook stated, that in Kansas the membership included wives, daughters, sisters, mothers and nieces of members in good standing, and proved to be very successful. Therefore, Mrs. Hornbrook was of the opinion that actual experience warranted eligibility of membership as obtained in the Kansas organization. A motion prevailed, offering as the opinion of the National Association, that membership in the Ladies' Auxiliary should be extended to the wives, daughters, mothers, sisters and nieces of members in good standing.

After several resolutions had been read and referred

to the Resolution Committee, telegrams expressing regret on inability to attend this convention, were read from National Director H. W. Hull, David Craig and Daniel Finnerty, also a communication from the Omaha Local Retail Plumbers Association, accompanied by a Resolution.

There being no further business, the balance of the meeting was occupied with a lecture by George D. Earl, General Superintendent of Sewerage and Water Board, of New Orleans, illustrated with stereopticon views and showed the magnitude of the task in providing New Orleans with an adequate water and sewerage system. This can best be understood when it is considered that a large part of the area on which the city of New Orleans is situated is many feet below mean tide level and that all sewerage has to be raised by at least one and in many cases three pumps in order to discharge it into the Mississippi River. This also applies to the surface water, which requires vastly greater pumping facilities,



MASSACHUSETTS DELEGATES AT NATIONAL CONVENTION
Left to right, D. F. Loan, Worcester, J. P. Perham, Boston, and R. V. Worthen, Leonminster, Mass.

as the rainfall has been as much as 3 in. in a single hour, all of which has to be raised with pumps in order to get it away from the City area. This lecture afforded the delegates an interesting and educational hour.

WEDNESDAY MORNING

President Durkin on opening the session, announced the appointment of E. J. Blake of St. Louis, as reading clerk and W. W. Hughes as his assistant. A telegram was read from J. G. Greenberg of the Trade Extension Bureau, announcing the first convention of the Nevada State Association of Master Plumbers, that officers had been elected and Reno selected as the 1922 place of convention; also from R. T. Rock of Bridgeport, Conn., extending best wishes. Adolph Mueller, president of the H. Mueller Manufacturing Co., Decatur, Ill., being then introduced, addressed the convention on the plumbing business. (Address will be printed in an early issue.)

Joseph F. Evans, president of the Wyoming Valley Supply & Manufacturing Co., of Wilkes-Barre, Pa., and a former president of the Eastern Supply Association, followed Mr. Mueller, and spoke in part as follows:

Trade Extension is not a patent medicine and therefore would not cure all the ills that confront the plumbing industry of today. Neither is it an utopian dream.

Trade Extension, like the American government, is the outgrowth of an ideal which, supported financially by those successful business executives that conceived it, is bound to be successful.

Trade Extension from its very inception became Prominent and has today risen to the point of Eminence. You will note, my friends, that I have differentiated between Prominence and Eminence and I have done so advisedly, because an idea or an in-

dividual must only stand out to be Prominent, but to be Eminent one must needs stand up, and the Trade Extension movement from its very inception has not only stood squarely on its own feet but has stood four square along the unselfish lines which characterized the wish of its unselfish creators.

Trade Extension has been criticized much to the annoyance of those vitally interested, but it's my thought that this criticism was justified, because, as another has said, "Truth grows not in seclusion but in the open field and thrives better under the sunlight of full and free debate."

Paraphrasing that thought so also do I conclude that Trade Extension, if it is as worthy as we think, will also thrive better under the searching sunlight of honest investigation—mark you, my friends, I said honest investigation.

We have arrived at a time that we can declare that Trade Extension is practically successful and in this instance I want it understood by success I mean something to be shared, not secreted.

To prove our unselfishness, the President of the Trade Extension Bureau must perforce be the President of the National Association of Master Plumbers, and the directing genius and manager must be a practical plumber and a member of your own organization, who has brought to this practical movement the informative theoretical knowledge necessary to be an educator.

Friendships between the manufacturer, jobber and master plumber should be conserved, while any attempts at old time price fixing theories should be condemned. Therefore my conclusion is that co-operation must be the keynote for development of your future wants.

Education is the chief ingredient for future progress.

Organization must ever remain the guiding or beacon light to accomplishment.

This Trinity of virtues ably supported by the Trade Extension Bureau should lift from the basements of the various cities and the highways and byways of America the plumbing interests and place them on the first floor of commercial opportunity.

In conclusion, I wish to leave this trite piece of philosophy:

If you wish to be successful in the silvery afterworlds,
Be a miser with your troubles and a spendthrift
with your smiles.

The report of the sanitary show committee, as submitted by Frank B. Lasette, chairman, was then read and showed a balance of 75 cents after having paid the expenses incident to the show.

At this time, an editorial was read from the *New Orleans Item*, as follows:

THE MASTER PLUMBERS MEET

The National Master Plumbers' Association of America is meeting in New Orleans this week. Of all lines of human endeavor none is more important than that of the plumber. Without his work the great populous and healthy cities of America and of the world could not exist.

Old New Orleans, with its open drains, its surface swamp water, its lack of modern sewerage and drainage, had a death rate that made city growth impossible. Modern plumbing, sewerage and drainage makes New Orleans one of the world's healthiest cities.

In city and state, and throughout our section of the South, the plumber's work is only partly done. Every house in this section, city and country, should have hot water or steam heat; it should have at least one workable bath tub; it should have hot and cold water, kitchen sinks, and other plumbing equipment.

The plumber has had the name of being an expensive citizen to do business with. In a big sense he is an expensive citizen to do business without.

One great weakness of the plumbers as a whole is their failure to advertise collectively and impress communities with the needs of modern sanitary plumbing. Again, they should convince the public of the reasonableness of proper charges for good work done. We do not recall in all of our observation what we would describe as a first-class, comprehensive, educational newspaper advertising campaign on the subject of modern plumbing. Yet such a campaign in New Orleans alone, continued over a period of years, would sell millions of dollars' worth of additional plumbing.

Our visitors in New Orleans will see some modern structures containing good modern plumbing. We trust that their deliberations here will prove profitable and that they will help spread the doctrine which it is to their interest to preach.

On motion this editorial was referred to the resolution committee with instructions to prepare a suitable expression of appreciation.

A favorable report was made on resolution submitted by the Pennsylvania State Association requesting a re-

duction of the per capita from \$5.00 to \$4.00 per year, and the recommendation of the committee concurred in.

WEDNESDAY AFTERNOON SESSION

The report of the Essay Committee, submitted by Joseph A. Sprouls, chairman, contained essays as follows: "Our Path to Success," by Joseph A. Sprouls, an essay from the Master Plumbers' Association of Connecticut; "The Value of Educational Publicity," by J. J. Loughlin, Chicago, and an essay by the Denver Trade School.

On motion, all essays were referred to the new officers with instructions to have them published in proceedings.

The report of the Conference Committee gave a resumé of the year's work by that committee, and showed that the Heating and Piping Contractors' National Association, the American Institute of Architects and the National Association of Master Plumbers, all approved of letting contracts where plumbing and heating is included in the general contract, only in cases where the value of such work amounted to less than \$1000. This report was referred to the resolution committee. A letter from Mrs. E. D. Hornbrook asked permission for the Ladies' Auxiliary to use the seal of the National Association on its stationery. On motion permission was granted.

The report of the Standardization Committee was then read by George H. Drake of Buffalo and showed work accomplished for the year as having accomplished no positive results, however the recommendations of the committee had been as follows:

1. Shall the long horn or short horn water closets be used? Is the recommendation made by your committee satisfactory that they make the closets both with the long and the short horn?
2. Shall the Master Plumbers' National Association continue to be a member of the National Standardization Association?
3. To what extent would you finance this National Bureau of Standardization?
4. Do the recommendations which the committee made in regard to the standardization of size of fuller balls, washers and couplings meet with your approval?

W. J. Wooley made his report as manager of the Trade Extension Bureau for the year (excerpts of which are printed elsewhere in this issue), which was referred to the resolution committee.

THURSDAY

Best wishes were extended in telegrams received from the Canadian Society of Sanitary Engineering, also from the Heating and Piping Contractors' Association of the United States, and from the Portland (Oregon) Local Association of Master Plumbers, requesting that the convention in 1925 be held in Portland.

The treasurer's report showed the receipts for the year as \$53,888.41, disbursements as \$24,743.45, leaving a balance in the treasury of \$29,144.96, with all bills paid except the running expenses of the 1921 convention.

The shortage of apprentices and journeymen plumbers and ways and means of increasing their number was given considerable discussion. This brought forth very pertinent facts relative to the obligation of the master plumber in doing his part toward the rehabilitation of the ranks of the industry, from George F. Reeke, Green Bay, Wis.; E. D. Hornbrook, Kansas City; Frank B. Lasette, New York; T. J. Bixby, Omaha; William H. Doyle, Philadelphia; P. D. McCarthy, Syracuse; A. C. Eynon and W. J. Woolley.

A resolution was reported by the Resolution Committee on the editorial which appeared in the New Orleans *Item*. This was adopted by the convention.

The board of directors recommended a payment of

\$1.00 per capita to be made to the Trade Extension Bureau for the ensuing year. This was amended so that an additional \$5000 was added to the \$1.00 per capita tax per member and a provision made that an additional \$5000 is to be made in case the jobbers and the manufacturers contribute an additional \$100,000, the executive board to have control and payment to be made at their discretion.

The standardization committee was instructed to recommend that manufacturers make closets with the long horn only. The question of the National Master Plumbers' Association remaining a member of the National Standardization Association, and the extent to which it should be financed was left with the incoming executive board. The committee's recommendation in regard to the standardization of the size of fuller balls, washers and couplings was approved.

A resolution was adopted recommending that due to the difference in labor conditions, in various communities, all members contemplating work in other communi-



N. J. KENNEDY, VICE-PRESIDENT, AND JAMES J. KEELEY, PRESIDENT OF MICHIGAN ASSOCIATION

ties or in localities, should first determine the labor conditions prevalent in that community, and govern themselves accordingly.

The Auditing Committee reported the books of the secretary and treasurer correct and commended them on the high class manner in which they were kept.

The Memorial Committee on the death of John Trainor reported progress and was continued.

On motion \$1000 was voted to the New Orleans Local Association of Master Plumbers to help defray the expenses of entertaining delegates.

THURSDAY AFTERNOON

The Credential Committee reported 702 delegates eligible and 327 in attendance. On motion the selection of the city in which the next national convention was to be held was left with the incoming executive force.

C. S. Whitcomb, Portland, Ore., in behalf of the Portland Association, extended an invitation to the association to hold its convention in 1925 at Portland.

Votes of thanks were extended to the local committee and lady assistants and also to the trade and local press.

The election of officers, being in order, President appointed George F. Uber, judge and A. C. Eynon, William S. Mylander, William Snudden and William Loftus, tellers.

ELECTION OF OFFICERS

Joseph W. Cannon of Chicago, was unanimously elected President.

The office of vice-president brought forth a spirited contest between John S. Irvine, Detroit, Mich., and Harry L. Hanson of Butte, Mont. The majority of votes being in favor of Mr. Irvine, Mr. Hanson moved that the ballot be made unanimous. Mr. Irvine was then duly declared elected vice-president. Richard J. Welch,

of Lowell, Mass., was again re-elected treasurer.

No more beautiful or lovingly tender scene will ever be enacted before the eyes of man than the presentation at this time to President Cannon by William H. Doyle of Philadelphia, on behalf of Mr. Cannon's mother, a ring which belonged to his deceased father. As the beautiful gray haired mother stood beside her son on the platform, lovingly proud of her grown up boy and scarcely able to restrain the tears of happiness in this the tense moment of his reward for service to his fellow man, Mr. Doyle said, "Your mother bids me give to you this token, not so much on account of its intrinsic value, as a remembrance of your dear father, as well as of your mother, and to tell you to always wear and cherish it as she has done." No heartstring in the convention hall failed to bring its flow of tears as the dear old lady in her beautiful joy was tenderly embraced in the arms of her grown up boy.

President Cannon selected C. A. Drier, Chicago, as secretary and the selection was duly endorsed by the convention.

The sum of \$500 was set aside to purchase a suitable testimonial for retiring President D. F. Durkin, Jr. George F. Uber, Philadelphia, Walter D. Nolan, Washington, and Frank B. Lasette, New York, were appointed a committee to purchase and present this testimonial.

A motion prevailed that the incoming board of directors be instructed to take up with the Trade Extension Bureau, the matter of establishing an apprenticeship educational department.

On motion, a vote of thanks was extended to the Ladies' Auxiliary for their co-operation.

There being no further business, the convention was adjourned sine die.

ENTERTAINMENT

While each day brought forth its share of convention work, thanks to the untiring efforts of the New Orleans Association, its ladies and friends there were many pleasure features which insured a good time to all. Many were the expressions of appreciation heard for the generous hospitality. Every one had a good time because there was something doing all the time and of such variety that insured to each something he could enjoy. Auto trips, boat rides on the Mississippi, lectures,



MR. AND MRS. WILLIAM LOFTIS AND
MASTER JOSEPH, ATLANTA

dances, vaudeville, movies, dinner dances and many other novel features were provided.

Many thanks are due to Manion Co., and the Go-Ro Co., who opened their places of business for dances and entertainments, as well as the Yacht Club where the finale of entertainment took place on Thursday night in the form of a dinner dance. This was a very fitting climax to a most hospitable four days among people who are masters of the art of hospitality. There were none

who left New Orleans without a feeling of having been most royally entertained by a most hospitable people.

THE EXHIBIT HALL A BEE HIVE OF ACTIVITY

A chapter should be written in the annals of this convention with a measure of tribute and credit to the local association, for the splendid exhibits. This annual feature is becoming more popular each year with the delegates, and has the further tendency to arouse strong public sentiment and dispel some erroneous impressions that have prevailed. Many of New Orleans' prominent citizens and architects were visitors during the Sanitary Exhibition and the displays of plumbing fixtures and



MRS. JOHN H. SLUIS, FLUSHING, N. Y., AND
MRS. AUGUST SCHALL, SYRACUSE, N. Y.

heating supplies were maintained in Hotel Gunewald.

Immediately upon entering the exhibit hall, the commendable display of the Wolverine Brass Works of Grand Rapids, Mich., where was shown the company's comprehensive line of traps, connections, basin and bath supplies, compression bibbs, rubber specialties, etc., attracted attention. In attendance were, H. C. Cornelius, secretary-treasurer; L. Cornelius, general manager; R. G. Cornelius, purchasing agent; O. G. Jentsch, chief engineer, and C. L. Brown, New Orleans representative.

Another exhibit that commanded favorable attention was maintained by the Kohler Co., of Kohler, Wis., presided over by L. L. Smith, manager of the company's promotional department, Stephen H. Gilmore of St. Louis, J. H. Inman and W. W. Bucher. They were showing the popular Vicerny built-in enameled iron tubs, pedestal lavatories, closet combinations, wall lavatory, kitchen sinks and double laundry trays. In an adjoining booth, they also made a practical demonstration of the Kohler Power Light. This unit starts automatically when any fixture is turned on and comprises all the conveniences claimed for any plant, and carries the Kohler reputation back of every plant installed.

The H. Mueller Manufacturing Co., Decatur, Ill., has another noteworthy exhibit consisting of its complete line of plumbers' high grade brass goods, also acquainting the visitor with its new line of solderless traps. Adolph Mueller, president, Philip Mueller, C. N. Wagenseller and W. B. Ford greeted the delegates.

M. W. Smith, sales manager, and W. H. Scott, Atlanta manager of the Duriron Co., Dayton, Ohio, were constantly surrounded with interested delegates during the demonstration of the effects of various acid tests on ordinary pipe materials and the resisting, or lack of effect of acids upon Duriron. Many new friends were enrolled for Duriron through their courtesy.

The Radio, meaning a boiler constructed for healthful hot water heat combined with open fireplace comfort, was on display at the booth of the Central Foundry

Co., of New York City, in addition to the widely known F. & W. Fittings. J. J. Crotty of Boston, an authority in sanitary engineering, and J. J. Kitchen of New York, were in charge of this exhibit.

The principal feature of the Wolff Manufacturing Co., Chicago, Ill., exhibit, was an all white bath room, the exposed trimmings finished by the "Wolfluid" process which gave the entire bath room a snowy white appearance. In addition, W. D. Sargent, advertising manager, had on display, a double drain-board kitchen sink, and a slop sink, and also a well chosen line of "Wolff Quality" brass goods.

The Compound Injector & Specialty Co. of Chicago, Ill., through George J. Dehn, president and general manager, and George B. Barron further popularized the Dehn Sanitary Safe guards, which included in their exhibits, "Deep Seal" floor drains, "Peerless" garage drains, "Acme" water cooled grease traps, hair traps, etc., and each visitor received blue prints showing the proper installation of the entire line of "Dehnsanigard."

"The Martin Portable Vise Stand and Pipe Bender is indispensable whenever pipe is to be bent, cut, threaded or fitted," was the convincing argument of "Cy" Martin of the H. P. Martin & Sons, Owensboro, Ky., and the delegates displayed a look of satisfaction when "Cy" completed his demonstration.

The space of the Bastian-Morley Co., LaPorte, Ind., because of the delay in the arrival of its heaters, limited them to the showing of only the No. 18 Royal Automatic Gas Water Heater and although handicapped, E. D. Pearson, southern representative, created an abundance of enthusiasm for the complete line of Royal Automatics, and Marvel, a non-automatic.

E. C. Hansen, of the Economy Scale Remover Co., Chicago Heights, Ill., with Mrs. Hansen, joined the Chicago delegation and had this convention been held a few months ago, we would have said, "They are now on their honey-moon." In fact it was quietly whispered that they were one of the "Newly-Wed" couples in attendance. But Ervin was too busy explaining the merits

The display of the Trenton Potteries Co., of Trenton, N. J., in charge of J. E. Moore, consisted of its Siwelco combination, extra wide and deep sinks, Tepeco closet combination, lavatories, etc.

Langdon Bowie, New Orleans manager, assisted by R. MacCartan demonstrated the John Douglas Co., Cincinnati, O., line of "Leader" combinations, and its other popular fixtures which have been recently installed in many of New Orleans' most prominent buildings.

Probably the most unique and artistic display in the exhibit hall was that of the Humphrey Co., of Kalamazoo, Mich. F. A. Lemke, general manager supervised this exhibit, which comprised tank heaters, type A automatic gas heater, finished in green and gold, bath heaters and their latest "Humphrey" shower heaters. McCullough Smith, J. Albin Johnson, and M. Marks, took care of the many visitors at this display.

Crane Co. of Chicago, Ill., with Louis Wolff in charge, had an extensive exhibit of plumbing fixtures and steam specialties. The booth was most attractively decorated with palms and tropical flowers and a delightful place for the tired ladies to rest.

Manion & Co., New Orleans jobbers, maintained an exhibit of vitreous china fixtures manufactured by the Thomas Maddocks Sons Co., Trenton, N. J., and also displayed miniature fixtures of a complete bath room. The gentlemen representing Manion & Co., were W. J. Manion, C. B. Harper, J. J. Fitzpatrick, and J. J. Daley, and those for Thomas Maddocks Sons Co., were Joseph T. Sullivan, advertising manager, J. "King" Kelly, J. "Prince" Kelly, and M. F. Whelan.

Another extensive display of water heaters for domestic use, was that of the Pittsburgh Water Heater Co., Pittsburgh, Pa., in charge of Frank B. Knapp, general manager. In addition to their line of tank and automatic heaters, the company was featuring the "Pittsburgh Bungalow" heater adapted for residences and smaller buildings. The delegates who visited this booth also met W. A. Copeland, R. A. Lovett and M. V. Burdette.



EXHIBITS AT NATIONAL CONVENTION AT NEW ORLEANS

Displays of the H. Mueller Manufacturing Co., Decatur, Ill.; Voia Trading Corporation, New York, and Henry James Veith, Jr.

of "Economy Boiler Seal" to give any consideration to these accusations.

W. J. Lantz, Western sales manager for the Duro Pump & Manufacturing Co., of Dayton, Ohio, was busy greeting and entertaining the many friends and customers of his company.

Frank A. Webb, of the Joseph A. Vogel Co., Wilmington, Del., became one of the most popular gentlemen in the exhibit hall when he gave to each visitor, a handy little tape measure and a sunbonnet. The No. 8 and No. 9 Vogel Combinations in their booth, elicited many expressions of satisfaction from delegates who had practical experience with their operation.

During one of his busy moments at the Kohler Co. booth Stephen Gilmore was agreeably surprised when the St. Louis delegation waited upon him, and their spokesman, A. A. Zertanna, in well chosen and appropriate remarks, presented Mr. Gilmore with a huge basket of American Beauties. After he had recovered, Mr. Gilmore replied that he would have these flowers grace the Kohler exhibit for a few days, and then donate them to the Charity Hospital of New Orleans.

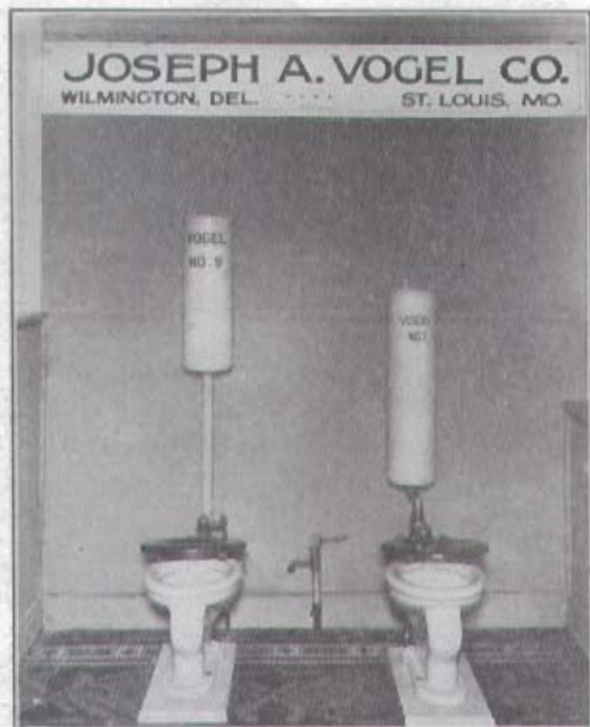
J. H. Ross, president of the Ross Manufacturing Co., of Kansas City, Mo., with E. G. Printy, had a comprehensive display of the new Ross tank, bulbs, ball cocks, flush valves, repair kits, force cups, brass goods

and rubber packings of every type and description.

Steam gas radiators with thermostatic control valve, were being demonstrated by the American Heating and Plumbing Co. of New Orleans, La., by L. E. Trosclair.

John Mahner was the lone representative of the Hoffman Heater Co., Lorain, Ohio, and there were times when he was exceedingly busy demonstrating how it was possible to "Get Hoffman Hot Water as easily as light" with the Hoffman line of Automatic Gas Water Heaters and Tank Heaters.

M. Glauber & Co., of New York City, had on dis-



DISPLAY OF THE JOSEPH A. VOGEL CO., WILMINGTON, DEL., AT NATIONAL CONVENTION

play, its "Paragon" ball cocks, a full line of "Shield" brand specialties, and featured its tank buoys. S. F. Battenworth, treasurer, and R. D. Pierce, secretary, were in attendance at this display.

Jahncke Service, Inc., was showing various types and styles of vitreous clay sewer pipe, as manufactured in the South.

An outstanding educational feature during the convention, was the moving picture demonstration, showing the manufacturers of Star Naco range boilers marketed by the Detroit Range Boiler & Steel Barrel Co., of Detroit, and from the large number of delegations constantly viewing this picture in the room of Tom Parker, it was so extremely popular that many returned for a second demonstration.

The headquarters of the Trade Extension Bureau adjoined the meeting hall, and during recesses, their parlor was the scene of a steady flow of delegates and guests. They had show windows correctly and incorrectly constructed to emphasize the necessity of back ground. They also showed a fire proof safe with interior arrangements best suited to the requirements of our trade. This safe is manufactured by the General Fire Proofing Co., of Youngstown, Ohio, and J. Roach was in attendance to assist George R. Doyle and H. E. Jones, of Evansville, in explaining to the delegates its many features. There were also on display complete bookkeeping systems, and accounting forms. The walls

were decorated with charts encouraging sales possibilities, and statistics of vital importance to the trade. W. J. Woolley, general manager of the bureau, divided his time between their headquarters, and convention sessions.

J. T. Quinn, Charles Coignard and Frank Smith comprised a trio of representatives who gave additional publicity to the Standard Sanitary Manufacturing Co., Pittsburgh, Pa., and whose display of a 5-ft. square bath room, with installations of all necessary bath fixtures was a pronounced feature. It was regretted that Charles B. Nash, manager of the promotional department, could not attend, and while it was his original plan to visit New Orleans, he was obliged to give attention, during this meeting, to some matters of importance at New York City.

One of the most practical and useful souvenirs distributed, was a leather bound memorandum book, thoughtfully provided by "Jack" Cripps, of the Eagle-Picher Lead Co., Cincinnati, Ohio, and the demand for these became so great, it was necessary for Mr. Cripps to secure a new supply. If any member of the trade desires one of these books, Mr. Cripps advises that it can be obtained by writing direct to the company.

The trade in the central western states, is familiar with "Bill" Hebenstreet and John Heinkel, who recently acquired control of the output of the Blake Specialty Co., of Rock Island, Ill. This concern manufactures a complete line of drains, traps, iron sanitary fittings, test plugs, etc., and both "Bill and Jack" claim they are booked with orders to keep the plant busy for some months.

It was a pleasure to greet the famous Harry Snow, who has been associated with the Peerless Selling Co., of Evansville, Ind., since the organization of that concern. Harry, who joined the Chicago delegation, has been a well known character at many former conventions, and was busy expressing good wishes to all the company's friends, from its general manager, Harry F. Weaver.

David Smythe of the Central Tube Co., Pittsburgh, Pa., certainly knows how to lecture on rigid conduits, coils and bends, for he was constantly surrounded by interested spectators.

Carey roofing products and Mott fixtures were displayed at the booth of the Standard Supply & Hardware Co., of New Orleans, La., by Joseph Kruebbe, A. E. Mazurette, Jr., and D. E. Boggess.

The Plumbing & Mill Supply Co., New Orleans, La., was showing the complete line of enameled iron ware made by the U. S. Sanitary Manufacturing Co., of Pittsburgh, Pa. Sloan flush valves were also displayed at this booth by Harry J. Veith, Jr.

Arco Wand Vacuum Cleaners, and Ideal Arcola Boilers were on display by the American Radiator Co., and in charge of Hayan Myer, manager of the New Orleans branch, assisted by J. Lanz, W. J. Quigg, and R. M. Keatts.

Charles F. Hause Manufacturing Co., Omaha, Neb., showed its line of rubber and brass specialties.

The Elliott Cook Top Water Heater is a new and unique method of conserving gas, by heating water while cooking meals. The Volo Trading Corp. of New York, was also demonstrating in addition, its Transmit-O-Phone, a device for detecting hidden pipes, leaks, drains, taps, and curb boxes. J. W. Elliott, patentee of their heating apparatus, and Philip Deutsch were stationed at this exhibit.

Henry Veith, Jr., who conducts a sales agency in New Orleans, was displaying products from some of his clients, such as the Pfau White copper, and the

Chino tank combinations, Sands heaters, Otto Bernz, torches and furnaces, Regent brass goods, and Novelty bath trimmings.

Nelson Goreau, president of the Go-Ro Inc., New Orleans, directed its exhibit of gas water heaters, which are of cone-shape construction and different from any other type of heater in the market. This company entertained in an elaborate manner all the visitors at their plant, furnishing refreshments and providing music for dancing. Its plant is one of the most modernly equipped of its kind in the field for the making of gas water heaters. Other Go-Ro representatives acting as hosts to the big gathering, were G. D. Warriner, L. M. Pfisterer, and J. A. McIntosh.

Germain Brothers Co., of Saginaw, Mich., has just entered the field with a new line of closet seats, known as the "Kant-Split." Messrs. White and Stewart were explaining the merits of the "Kant-Split" seats to numerous visitors at the booth.

Samples of Hercules drain pipe solvent were given the delegates by A. Stahl of the Hercules Chemical Co., of New York City. This company claims its solvent will clear any drain pipe stoppage not caused by glass, metal or other solid substances.

The Fairbank Co., through the New Orleans branch, was showing its line of valves and scales, also hospital supplies and plumbing fixtures, which it jobs in the southern territory.

The gas appliance department of the Trolley Supply Co., of Massillon, Ohio, displayed the Franklin Steam Radiator, equipped for gas fuel and provided with a thermostatic valve for the regulation of the pressure. H. K. Fenwick, secretary, and J. V. Stief-Vater were in attendance at this exhibit.

Nick J. Gondolf Co., of New Orleans, was showing a tank without a rubber ball which, as it claims eliminates the former troubles of leaks, valve timbles, and expensive repairs.

Weisteel compartments, as displayed by the Henry Weiss Manufacturing Co., Atchison, Kan., consisted of partitions and doors of rigid steel construction, forming the enclosure of toilets, showers and dressing rooms.

Among the quantity of circulars and catalogs distributed, were the following:

Cleveland Gas Burner & Appliance Co., Cleveland, Ohio, describing the Clevevil burner for fuel oil or kerosene, and its Barber Burners of various sizes and types for boilers and furnaces.

Street & Kent Manufacturing Co., Chicago, Ill., showing its new line of showers, mixers and shower heads.

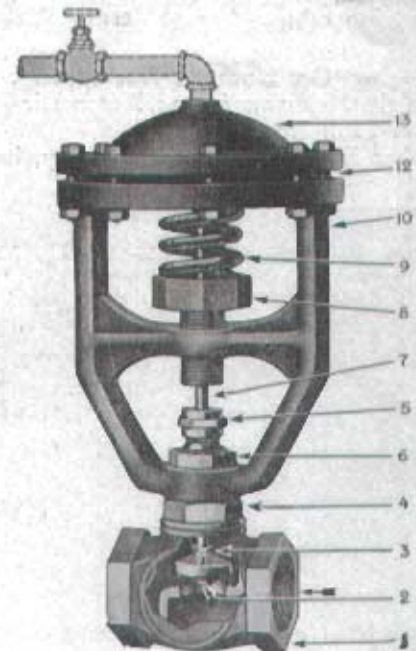
The Goeniger Manufacturing Co., Columbus, Ohio, showing the "Testite" closet bowl connection for both long and short low bowls.

The Universal Equalizer Co., Cincinnati, Ohio, showing a new vise attachment, which fits any vise and firmly gripping all shapes or irregular objects.

Steam Water, Air and Gas Regulating Valve

The Midget pressure regulating valve is manufactured by the McAlear Manufacturing Co., 1901-7 South Western avenue, Chicago, Ill. It is designed for use in controlling steam, water, air or gas pressure for any and all service where close regulation is desired. These valves are specially suitable for use in connection with hot-water tank heaters, kitchen utensils, sterilizing apparatus, laundry jacketed kettles, dryers, etc. By decreasing the spring tension they can be regulated to maintain any desired pressure down to 10 lb. from an

initial pressure of 125 lb. The small pipe is connected into the distributing line where the desired pressure is wanted and as the steam, water, air or gas passes through the valve to reduce the pressure line, pressure



MIDGET PRESSURE REGULATING VALVE

is exerted in the small pipe which in turn is distributed on diaphragm so that when the desired pressure is reached, the diaphragm forces the valve down on its seat, thus stopping any further flow until such time as the pressure is reduced on the diaphragm of valve. The valve is constructed of the best quality of Government bronze metal in all sizes up and including 2 in. Further information can be had by addressing the company.

A Sectional Expansion Plate

The sectional expansion plate illustrated is manufactured by the Beaton & Caldwell Manufacturing Co., New Britain, Conn. As will be noted this plate is fitted



SECTIONAL EXPANSION PLATE

with a lug on the lower side and a groove in the upper side of plate, thus allowing of a series of these plates to be erected forming a very rigid and solid construction, thereby avoiding the necessity of carrying all the different variety of hook plates in stock. It has a further advantage in that the plates are interchangeable, thus several different sizes of plates may be used in the same series. These sectional type of plates may be had in the hook or expansion type as desired.

Death of Karl G. Roebing

Karl G. Roebing, secretary and treasurer of the Trenton Brass & Machine Co., Trenton, N. J., died at his home in that city on Sunday, May 29.

Factory Lavatories

The battery of Tepeco solid porcelain double bowl factory lavatories, manufactured by the Trenton Potteries Co., Trenton, N. J., is set on the "Universo" frame which is so designed as to permit of the inter-



"TEPECO" FACTORY LAVATORIES

changing of parts to support the different types and sizes of lavatories and wash sinks. Also ample adjustment is provided for setting fixtures as far apart as conditions may require.

This is the latest and most sanitary design for factory equipment and affords the plumber an opportunity of soliciting factory work, as it is a well established fact that cleanliness and proper sanitation has a very important effect on the efficiency of factory employees. Complete information can be had relative to these fixtures by addressing the manufacturer.

Frost Proof Set Length

As the name signifies, the Frost Proof Set Length is designed to prevent freeze-ups on deep well pumps where the pumping head has to be kept on top of the



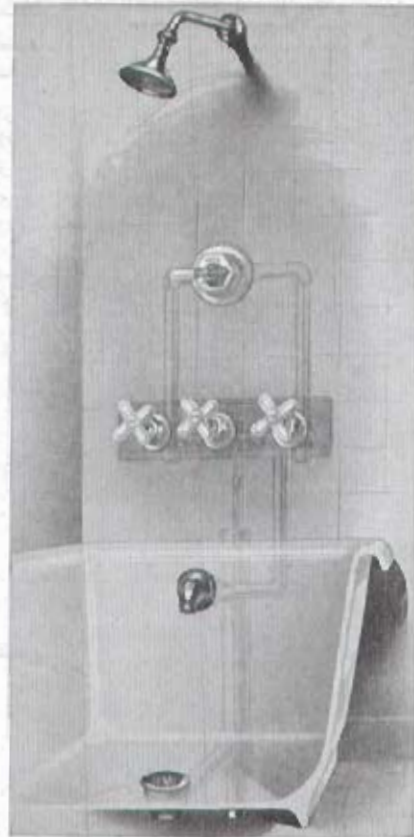
FROST PROOF SET LENGTH

ground, directly over the well, and no frost-proof pit is available. As will be seen by the cut, this consists of an extension length on which is fitted the housing which contains the stuffing-box, the automatic control and the

air pump. It will be noted by illustration that the end of the air pump is placed on frost-proof head, and this arrangement prevents possibility of the air tube to the pump freezing and thus defeating the permanence of the Frost Proof Set Length. Further information can be had by addressing The Burnett-Larsh Manufacturing Co., Dayton, Ohio.

Deshler Bath Fixtures and Mixometer Shower

The Deshler bath fixture is constructed so that the valves are of by-pass pattern, thus permitting connections to be made either from above or below, the other end of the valves being plugged. The waste is oper-



DESHLER BATH FIXTURE AND MIXOMETER SHOWER

ated by the eccentric lift on center handle, as shown in illustration. As connected with the mixometer shower, each valve has its respective lower connection and the two upper connections are connected to the mixometer and thence to the shower head, which allows of a very convenient and practical shower connection, with plenty of adjustment to take care of any ordinary variations of roughing installation. The valves themselves are of the Hi-seat pattern. Information as to price and roughing measurements can be had by addressing the manufacturer, the Speakman Co., Wilmington, Del.

The Adjustable Fuller Ball

It is common knowledge that a fuller ball when put on, no matter how good the ball, will not give satisfaction if improperly adjusted. In order to meet this necessity for accurate adjustment, the Good Manufacturing Co., 305 East 134 street, New York City, has placed on the market the adjustable ball, as shown

in illustration, which has an extension at the front of the ball which can be cut off with an ordinary knife so as to bring the ball at the proper location on the stem, in this way making for a quick and accurate ad-



ADJUSTABLE FULLER BALL

justment. In every way these balls measure up to the high quality of the goods manufactured by the Good Manufacturing Co., and fill a long standing need.

Eastern Golfers at Fox Hills June 21

The conducting of the tournaments of the Eastern Trade Golf Association for the season of 1921 will not make the heavy tax formerly upon Captain J. B. Garfield to whom great credit is due for his work in the past. This year W. A. Burtenshaw, chairman of the tournament committee, aided by S. L. Greason, S. J. Cutting and J. F. Weaver are relieving the captain as the tournament committee should do. They had a meeting recently and have selected the dates and places for several meets this year.

The next meet will be on the links of the Fox Hills Country Club, Staten Island, on Tuesday, June 21. The players will leave the Municipal Ferry at Whitehall street for Staten Island and will be met by the club bus. This course has been secured through the courtesy of E. F. Keating. The two leading events of the day are the ball foursome match which will be played in the morning and the 18 hole medal handicap which is scheduled for the afternoon. This enables the players to get acquainted with the course in the morning so that they can go out after the chief prizes in the afternoon.

The charges for the day including the green fees and dinner at the club house in the evening will be \$6.00 per man. A number of valuable prizes will be offered. Those who intend to be present are requested to notify the secretary on a postal card that is sent with the notice.

Plant and Firm Extensions and Changes

The Troop Mfg. Co., Pittsburgh, manufacturer of water heaters, tank heaters, etc., has removed its plant to 2516-26 Jane Street, Southside, recently acquired, comprising a two-story building 80 x 120 ft. It is proposed to triple the output and with available adjoining land, additions will be erected at a future date. Robert A. Troop is president.

The Crane Co., 636 South Michigan Avenue, Chicago, manufacturer of pipe, fittings, steam specialties, etc., has taken bids for the erection of its new plant at Thirty-fourth Street and the Allegheny Valley Railroad, Pittsburgh. It will include a six-story and basement pipe and pipe bending shop, 192 x 292 ft., and is estimated to cost about \$800,000 with equipment.

The B-J Generator Co., Lowell, Mich., has been incorporated with a capital of \$500,000 by John E. and O'Neill Best, and Nicholas J. Politis, 532 Ottawa street, Grand Rapids, Mich., to manufacture steam and gas

generators, pumps and other similar machinery.

The New York Blower Co., 608 South Dearborn street, Chicago, manufacturer of mechanical fans, blowers, etc., is considering the erection of a one and two-story addition to its plant at Laporte, Ind. Henry Mathews is acting president.

The Illinois Pipe & Manufacturing Co., 2111-2129 South Jefferson street, Chicago, has moved to 3465 South Lawndale avenue.

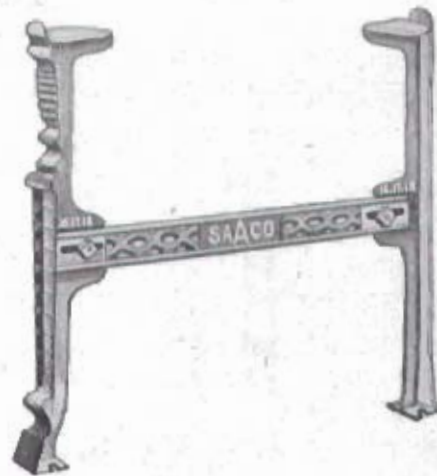
The New Jersey Blower & Manufacturing Co., East Orange, N. J., has been incorporated with a capital of \$50,000 to manufacture mechanical fans, blowers, etc. Charles O. Geyer, 525 Main Street, represents the company.

Edward D. Holly, Newark, and associates have organized a company to manufacture pipe, fittings and other plumbers' supplies and have acquired the factory at Dawson and South streets, 100 x 100 ft. The different buildings on the site will be remodeled and improved and machinery installed for manufacture. Possession will be taken at once. Others interested in the company include Joseph A. Thompson and A. W. Mayer.

The Never Fail Products Corporation, New York, has been incorporated with a capital of \$110,000 by W. O. Rogers, Jr., J. H. Ballantine and G. R. Pruden, to manufacture electric, gas and water measuring and controlling devices. George A. Gregg, Bridge Plaza North, Long Island City, represents the company.

The Saaco Adjustable Wash Tray Leg

The adjustable no tip wash tray leg, as shown in the accompanying illustration, and manufactured by the Sanitary Co. of America at Linfield, Pa., has just been



SAACO WASH TRAY LEG

placed on the market. As will be seen it consists of two standards bolted together with an adjustable cross bar and allowing it to be fitted to any size tub. It is



SAACO ADJUSTABLE WASH TRAY LEG FOLDED

shipped knocked down, securely packed, thus eliminating the danger of being broken and reducing shipping weight. Its cost is about the same as the old style leg.

Advantages of Proper Bathing for Workers*

Increased Working Efficiency and Larger Production Result in Industrial Plant Where Modern Bathing Equipment Is Installed

By J. LEONARD MASON

The majority of plants, including great department stores, factories and office buildings, have modern bathing equipment installed.

Most employers of labor have a human interest in their employees. They want their people to be happy on the job. There may be exceptions, but the employer who does not acquire this frame of mind cannot long be successful. It is a shortsighted man or board of directors that fails to appreciate the advantages of installing the best possible bathing facilities for the employees. I say the best possible facilities because the equipment must be attractive or else it will be little used.

Strange as it may seem, the average individual does not take to bathing "like a duck to water." The delights of the refreshing bath must be thoroughly felt to have the habit fully acquired.

THE PLANT BATHING EQUIPMENT SHOULD BE MODERN

We might talk on the physical, social and moral benefits of the bath until we are exhausted, but the crowd of dusty, grimy workers will hurry out of the plant on their way home. So, I say that first of all the plant bathing equipment should be modern and kept in good working order; that means hot and cold water running smoothly and easily adjustable.

Some one may raise the question, "Why shouldn't the workers do their bathing in the homes?" Many of them do. But the majority leave the plant without bathing and find enough to do when they get home before supper to keep them busy and the bath is neglected.

The man or woman who has been working all day under more or less dusty, dirty conditions, perspiring freely in hot weather, is more or less uncomfortable and often irritable. It would be better for the peace and tranquility of the home if every worker made it a part of his daily routine to bathe and change from working to street clothes before leaving the plant. Good, generous sized lockers should be provided where street clothes can be kept during the day or working hours. Let the employee contribute a small fee toward expense and maintenance of lockers and bath room.

CLEAN BODY IS CLOSELY RELATED TO A CLEAN MIND

In our plant we have a large locker room with 2,500 lockers and 20 modern showers, also 4 long wash basins with 192 spigots, for bathing above the waist. The tub bath is impractical at the plant; it is not desirable where many people might use the same tub and it needs constant attention to keep it in order. The shower baths are sanitary, and the effect on the workers after a hard day's toil is pleasant. A clean body is closely related to a clean mind. Some men would stop shouting, "Down with everything," if they had a well regulated spray of water down their back oftener. The exception might be in case the shower was not in order and a man got the hot water when he turned on the cold.

I have seen men apply at the employment department

so grimy that the examining physician hesitated to put the stethoscope on them and simply examined by distant inspection. Poor fellows, they appeared down and out. The dry skin, lustreless eye, unkempt appearance generally denote a loss of ambition or any sense of self-confidence. That is the man we want to clean up, body and mind, and turn out a good American workman.

BATHING IN THE "LABOR BARRACKS"

Our company maintains a labor barracks where men who have "no regular place to call home" may board. This naturally brings together all kinds of people. These men are quite regular in their bathing, and if inclined to be neglectful their fellow boarders see that they are reminded.

The "Barracks" has its own shower, bath room and set tubs for washing clothing. Most of the men scrub their own underwear and working clothes.

We are all more or less familiar with labor conditions and labor problems, also the experiments which have been used to find solution for these problems. Various welfare schemes have been tried. The conclusion which some of us have arrived at is this: That the best policy is to emphasize the things which add to, or give a man, self-respect. Give him ambition and a sense of amounting to something among his fellow men. No dirty, filthy being can have any self-respect nor does he gain any respect from others.

"Get Clean and Stay Clean" is our motto. The dirt of honest toil acquired during the day is the sign of a real man, but if allowed to remain there, clogging the pores, that individual begins not only to look dirty but he will think dirty, talk dirty, and act dirty. Nobody wants him around.

THE WISE EMPLOYER WANTS "CLEAN CLASS" EMPLOYEES

There is too much talk of class distinction. It does not make any difference what job a man holds, it's the kind of man he is that denotes his status in society. Is he in the clean or the unclean class? The wise employer will want his employees to be in the clean class. He knows that, from the standpoint of production, those who take care of their health can and will do better work than those who neglect it. He does not make the mistake of saying: "It's up to the people who work in the plant to have sense enough to take care of themselves in personal matters." No, the wise employer and board of directors will say: "This business is run on a co-operative plan. We will not do anything which tends to take away from any man's individuality by doing the things which he should do for himself, but we will go fifty-fifty with our men in providing a safe shop, a clean shop, and reasonable facilities for personal comfort throughout the plant." Add to this a fair wage for a fair day's work and you have a good American labor policy.

Bathing is a matter of education; many a bath tub is used for a coal bin. Popularize bathing; get a good,

(Continued on Page 388)

* Safety Engineer, Sun Shipbuilding Co., Chester, Pa.

Of What Use the Master Plumbers Association?

A Few Accomplishments of the National and State Associations Show the Vast Amount of Progress Made by the Industry and the Benefits Derived Therefrom

By FRANCIS C. SCHILLING

Remembering that for 20 years you have been annually addressed in a convention call progressively expressing the thoughts of my esteemed predecessors, one would assume that nothing interesting and of present moment remains unsaid. But, of what use is the Master Plumbers Association?

I shall not here dwell on the fraternal and kindly spirit and influence which so evidently reflects upon us as businessmen and as craftsmen, and was born of and is maintained by fact of our associations.

Those who, by studying the history of our associations have endeavored to find an honest comprehensive answer, have met no difficulty in proving the association's "good" and "usefulness." They will see that our master plumbers associations have highly served and will continue to highly serve broad, most useful and beneficial public purpose and that they have justly promoted all the elements of the plumbing industry, and that selfishness has not been dominant, and that we are a worthy part of society.

The scope of this address will not permit of more than a here and there recalling of the memory to the "good" and "usefulness" of our associations, but as a mere hint of its "good" and "usefulness" I refer you to our history, wherein is recorded our work which is reflected throughout the world and is generally termed "sanitary plumbing."

Our Master Plumbers' Association may justly claim the initiative and development on the field of broad sanitation. As an instance, refer to our National's seventeenth annual convention, held at New Orleans, La., March, 1899. Learn of the environments of New Orleans then and compare them with those you will find when you attend our National convention to be held at New Orleans this June, and note in 1899, March, was selected as the most likely to be free from "yellow fever" but now June or any other month is good and safe. Then learn as to what influence very materially initiated and promoted this betterment.

GENERAL DEMAND FOR COMFORT STATIONS

There now is a proper and general demand for public comfort or convenience stations and upon investigation you will discover that many years ago our affiliations as individuals and as associations took the initiative steps leading to the present demand.

Years before the establishment of the United States Federal Trade Commission our associations realized that there was something wrong with American business methods, especially relative to plumbers, and to discover the entire wrong with the view of correction, our affiliations took up the study now known as "Business Education."

The standardization of "angles and the pitch of thread on screwed pipe and fittings" and of angle of cast fittings and much other highly useful detail work attached to our business, serve to demonstrate

* Excerpts from the address of State President Francis C. Schilling, California.

the work in which our association took initiative and progressive steps.

The minimizing of the damage to enameled and to earthenware plumbing goods gives evidence of our activities, as also does the settlement of the meaning of the word "guaranteed" as applied to plumbing goods.

And so I might continue citing fact upon fact proving the "good" and "usefulness" of our associations, not only the master plumbers and the plumbing industry, but to society at large. I shall content myself in the belief that these mere intimations will sufficiently serve the present occasion. That is to say, will serve the purpose of calling your interested attention to our coming convention, which will be held at Camp Curry, Yosemite, May 19, 20 and 21, 1921.

This convention will afford you the opportunity of hearing an illustrated-demonstrative lecture rendered by an able representative of the National Trade Extension Bureau—not a dry and tedious discourse, but a highly comprehensive and lucid disclosing of the fundamentals upon which a successful and profitable business career may be built, as against the uncharted sea upon which so many business careers flounder.

There will be a series of object lessons at once, novel, interesting and profitable.

There will be a descriptive and illustrated demonstration showing the manufacture of plumbing material as also a display of novelties in plumbing material. Important and interesting reports will be brought before the convention. Indeed, you will find every moment exceedingly entertaining, and from a business, dollars and cents viewpoint, more than worth while.

Advantages of Proper Bathing for Workers

(Continued from Page 387)

live leader to advertise the advantages of the shower bath, spreading the information that "It makes you strong." "Bathe and be healthy." "Use the showers and be an athlete."

Some of every plant's workers will bathe at home, others will use public baths if available, or Y. M. C. A.'s or athletic clubs. But besides this, bathing facilities should be a part of every industrial plant equipment.

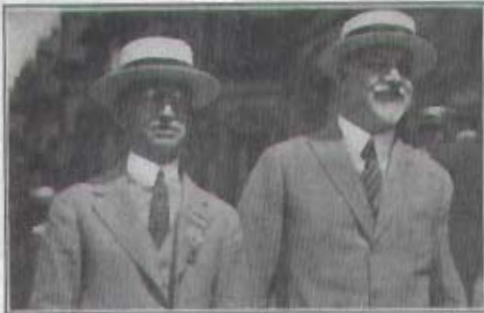
THE TIME FOR THE BATH IS RIGHT AFTER WORK

The time for the bath is when you need it—right after work. It's a matter of health, hence a matter of production. So I would say to the captains and all other officers in the industrial army: Don't neglect to put in swimming pools by all means if you can; then keep them up to best working efficiency and advertise the value of their use, as you advertise the products of your plant.

Heating and Piping Contractors Meet in Boston

The Thirty-second Convention of Heating and Piping Contractors' National Association One of the Largest Ever Held—A Spirit of Optimism Prevailed, the Members Being Pleased with Accomplishments of Year and Confident that the Revival of Business Is at Hand

Construction, the apprenticeship problem, standardization, Americanism, National Trade Extension Bureau work and the labor question held forth as the principal topics for the consideration of the thirty-second annual convention of the Heating and Piping Contractors' National Association, at the Hotel Brunswick, Boston,



AT CONVENTION OF HEATING AND PIPING CONTRACTORS

National Treasurer Harry G. Black, Philadelphia and Homer Addams, vice-president of Kewanee Boiler Co., Inc.

Mass., on May 30 to June 2, inclusive. Between seven and eight hundred officers, delegates and guests from every state in the Union with the exception of Texas, with 131 strong from Chicago, were on hand to take part in the deliberations, enjoy the hospitality of the Boston local association and participate in what many considered one of the largest and most successful conventions ever held by the National Association.

Stirring and educational addresses were delivered by Channing H. Cox, Governor of Massachusetts, Honorable George W. Cartwright, Senator of California, Daniel L. Hanson of the National Trade Extension Bureau, James S. Cassedy, past president of the National Association of Master Plumbers and C. W. Obert, secretary of the American Society of Heating and Ventilating Engineers.

M. Loring Danforth of Buffalo was elected president; George M. Getschow, Chicago, vice-president; Harry B. Black, Philadelphia, treasurer; Henry B. Gomers, New York, secretary and John T. Bradley, St. Louis, sergeant-at-arms.

TUESDAY MORNING

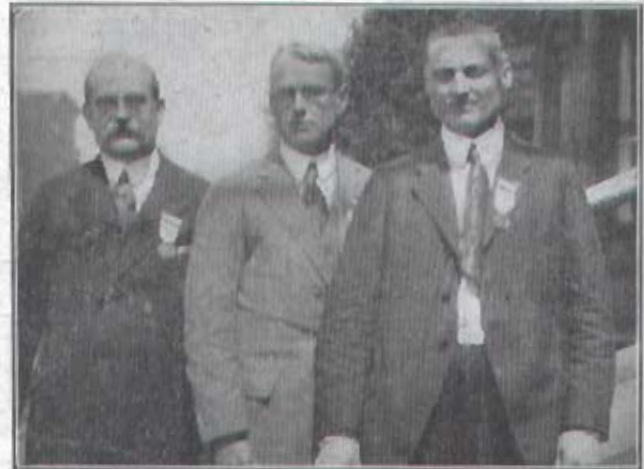
The convention was opened, President J. E. Rutzler presiding, with the singing of "America," after which Joseph P. Lomasney, chairman of the schoolhouse committee, representing Andrew J. Peters, Mayor of the city of Boston, being introduced, extended the welcome and freedom of the city to the delegates and guests.

President Rutzler responded for the convention and then delivered his address (the annual address of the President), and spoke in part as follows:

"At this convention, I feel sure that not only have we a large gathering assured but our sessions to follow will be full of enthusiasm and interest, bringing to all an appreciation of the value of proper co-operation in association effort. For, after all, in every phase of life the degree of our success is measured by the effort we

are willing to unselfishly throw into such work. This is so much so that I have taken the quotation of that great American, Theodore Roosevelt, that 'Every man owes some of his time to the upbuilding of the profession to which he belongs,' and this, ladies and gentlemen, expresses so briefly and tritely the whole basis upon which our National Association is constructed and should thrive, that we might do well to keep this always before us in our office, in our association rooms and elsewhere, as a constant reminder that in our own best interests we would do well to give some of our time to the service of our fellow members and to the association and to support the officers in their efforts in our behalf. This convention is your convention and neither your officers nor any clique should run it. You have something to say of interest to all others here and they want to hear from you, and all concerned will be benefited by free and open discussion and interchange of ideas along lines strictly in accordance with the objects and purposes formally adopted when constructing this association.

"One great handicap to which we have all been subjected recently is the great stagnation of building construction which appears to have been prevalent throughout the country. While this seems not an entirely new condition to contend with, still at this time it differs in its cause from the depressions of the past in that the present lack of new construction is because prices of material and labor were so high as to make investment in buildings a doubtful source of revenue. The high



NATIONAL OFFICERS OF ASSOCIATION

National Secretary Henry B. Gomers, New York, President-elect N. Loring Danforth, Buffalo, and Vice-president-elect George M. Getschow, Chicago

wages procured by labor during the war period have been difficult to break down. When we consider that in the course of practically any product entering into building construction from its origin as raw material through the various stages of manufacture until its final state of completion, it is erected in the building, that substantially 80 per cent of that final cost is for labor, we can realize how important a part is played by wages maintained at a level not justified by the efficiency with which

men now work in most lines. When we further consider that not only have wages increased fully 50 per cent over what they were in prewar days, but that efficiency of labor has decreased in practically the same ratio, then we begin to understand some of the reasons why the public generally complain of building costs and demand heavy wage cuts. Prior to the first of the year, there was plenty of work and more skilled mechanics were required than could be found and under such conditions the country had little chance of getting back to a production basis, a requirement most needed and one which applied to every industry alike.

"First, the larger interests began to appreciate the situation and advocate wage reductions, the steel manufacturers and the railroads sought to re-adjust existing wage conditions. And such men as Judge Gary of the United States Steel Corporation pointed out at every opportunity that until such time as all workers will do a square day's work again for a square day's pay, general industry cannot come back and that good times will come again just as soon as men will really work, not before."

On the apprenticeship problem, President Rutzler said, "If no solution of this important problem is promptly found, we are sure to find ourselves, not more than 10 years hence, with an insufficient number of skilled mechanics to carry on the business waiting to be done, with the result that the industry of steam and pipe fitting will slowly but surely be absorbed and substitutes for the steam fitting contractor as now known, will be found."

THREE FUNDAMENTAL QUALIFICATIONS

"There are at least three essential fundamental quali-



DELEGATES AND GUESTS ON THE ROCKS AT SWAMPSCOTT

fications necessary if a young man is to become a successful apprentice for our trade. First, he must have arrived at an age mature enough to know his own mind; second, he should have had the benefit of at least a grammar school education, and third, he should be physically fit for the work he is called upon to do. After an apprentice with these qualifications shall present himself, some competent body representing the employer and the journeymen in his locality should undertake to assure the applicant an opportunity to become proficient in a varied line of work over a period of

several years, after which he should be permitted to present himself for examination and if found qualified, should be advanced to journeyman steam fitter rank.

"In some of our cities, large and well equipped trade schools are already established having steam fitting classes offering fine opportunity to an apprentice, but



PART OF CONVENTION GROUP

unfortunately the local trade unions do not always look with favor upon the graduates of such schools with the result that upon completion of his course, the prospective steam fitter finds he must go to some outlying district to get his start. This prejudice on the part of some labor leaders should be overcome and we should use every effort to accomplish this without delay, in the interests of the industry as a whole. It has been briefly said that, "The youth of to-day is the man of to-morrow and he is an asset or a liability accordingly as he may be able to see the light." Have not we, therefore, a responsibility toward the development of an adequate apprentice system for the making of future steam fitters, which responsibility we should accept without delay and diligently apply ourselves to its successful solution."

Governor Channing H. Cox, being introduced, extended the welcome of the Commonwealth of Massachusetts, and stressed the importance that all should get an inspiration from Boston, as it is a neighborhood of many historical spots, many of which are closely connected with the establishment of this, the first representative government of the world. Also, that there are as great opportunities for success now as ever there were, and every man or woman who is willing to pay the price of success by working for it, will most surely be rewarded in proportion to his or her efforts. Also, that America demands and deserves the best in every man, woman and child and is worthy of the very best that each one can give.

The report of the Board of Directors then read by George M. Getschow, chairman, summarized the work of the board during the year, calling attention to the need of supporting such legislation as will permit of separate bids on the mechanical equipment, such as heating and ventilation, plumbing and gas fitting, electrical work and work kindred to these branches, as distinguished from the general construction of the building.

The finances of the association were reported as be-

ing in a very satisfactory condition, a small gain made in membership, and that the Board of Directors had renewed the contributions to the research bureau at Pittsburgh, established by the American Society of Heating and Ventilating Engineers, the National Trade Extension Bureau, and the Chamber of Commerce of the United States of America. In this connection, it was pointed out that it might be well to call attention of the members that each one who is in good standing in the association is by reason of that fact a member of the Chamber of Commerce of the United States of America, and if, at any time, there is any information that the chamber has that would be of interest to the members, it is at their service upon call.

President Rutzler then announced the appointment of the following committees:

Credentialed—P. L. Guest, Georgia; Karl L. Ziesse, Michigan; John S. Jung, Wisconsin; William G. Bergner, Illinois, and V. L. Sheldon, chairman, Missouri.

Auditing—J. T. Dyas, Charles Schneider, and William H. Curtin, all of New York.

By-Laws and Rules for Convention Procedure—Frank H. Howard, Massachusetts; W. P. Scott, Cali-



ATTENDING HEATING AND PIPING CONTRACTORS' CONVENTION

fornia; F. S. Spencer, Minnesota, and Harry G. Black, chairman, Pennsylvania.

Appeals and Grievances—Arthur B. Fels, Maine; Harry Smith, Tennessee; C. P. Greenen, Indiana; J. E. McGuinness, Pennsylvania, and Thomas Egan, chairman, District of Columbia.

Nominating—N. P. Bishop, Connecticut; H. M. Hart, Illinois; Edward Maurer, Ohio; George H. Drake, New York, and S. A. Jellett, chairman, Pennsylvania.

Association Improvement and Resolutions—George Mehring, Illinois; George M. Scott, New York; Walter Klie, Ohio, and N. L. Danforth, chairman, New York.

Following several announcements relative to the group photograph and the auto trip, the meeting stood adjourned.

TUESDAY AFTERNOON

One hundred and twenty two automobiles were provided for the sight-seeing ride through Boston, along the North Shore to Marblehead Neck. Every car was

filled to capacity and a most enjoyable ride through historic Boston and its suburbs, under ideal weather conditions, gladdened the heart of every delegate and guest, whose good fortune permitted him to make the tour. As a very fitting climax a delicious dinner was served at the New Ocean House at Swampscott, where a stop was made on the homeward journey.

Between six and seven hundred delegates and guests packed the large dining room of the Ocean House to its capacity and participated of a most bountiful and delicious meal. After a social hour spent in getting acquainted and renewing old friendships, the return trip to Boston was made, thus ending a most successful afternoon of wholesome pleasure.

WEDNESDAY MORNING

President Rutzler, on opening the session, introduced the Honorable George W. Cartwright, Senator from California, who addressed the convention on "Problems Which We Must Help to Solve," pointing out that carloads of false propaganda were daily being spread throughout the length and breadth of this country. Senator Cartwright stressed the need of firmly impressing on the minds of every inhabitant of the country that there is no working or capitalistic class in this country, inasmuch as any group of men or women to measure up to the definition of class, as understood by the labor agitators, Bolsheviks and their kind, must be without opportunity, as is the case with the classes in Europe, where for generations, a family or group of inhabitants must and do follow along in certain channels established by custom, with absolutely no opportunity or chance of bettering their condition, either as a class or as individuals. Illustrating this point, the senator stated that under the conditions as they exist in some parts of Europe, if one's grandfather made his living by digging post holes, that would inevitably be the occupation of all the family—grandfather, father, son and his progeny—with absolutely no chance to change or better their condition and no better outlook than to continue to toil early and late digging post holes to eke out a scant living. In contrast with such conditions, the senator pointed out the opportunities for advancement open to every man, woman and child in this country who is willing to work for advancement. This refuted every implication of class in this country.

In regard to the depression, the senator said in part that depressions are, and this one is, caused by the pyramiding of prices, causing a strain of credit, which results in the final break or depression. Credit relations must be again established on a sound basis to insure business revival. This is being rapidly accomplished in America and we are on the eve of a business revival, which is being hurried in this country, because we have three things working for it, viz.: (a) Gold is rapidly accumulating in the country; (b) The Federal Reserve Bank is stabilizing loans and is a very active agent in liquidating over extension of credits; (c) We have President Harding in whom all can and do have confidence in his every day solid common sense.

Continuing, the senator stressed the importance of the present opportunity of the employer to mold the minds of employees in a way that will make for sound Americanism and prove a Godsend to business relations in the future. The present is not a time to chastise labor, but the biggest and best opportunity in the history of man to show labor that the employer is the best friend of the employee, the interests of all are one, there are no classes, that everyone can and does get out of life just about what they put into it. To do this, the

employer must now keep every man possible on the payroll, a system must be established to develop managers of men, employees should be offered every opportunity for advancement and freely helped to better themselves. The closed shop means closed labor—closed opportunity. England is ruined with it, labor must be made to see and realize that labor always pays its own wages.

J. S. Cassidy, past president of the National Association of Master Plumbers, representing President Durkin, conveyed to the Heating and Piping Contractors' Convention, the best wishes of his association and stressed the need of the organization and individual members actively participating in and in every way protecting the best interests of the public in civic matters.

TRADE EXTENSION TALK

Daniel L. Hanson, field representative of the National Trade Extension Bureau, in a very able manner brought out the work being done by that bureau in a way that exposed the core of existing conditions and left no room for doubt as to the need of the work or the value of its accomplishments for the heating and piping industry as well as for the plumbing industry, and incidentally in its entirety a valuable and economically sound proposition for the public.

C. W. Obert, secretary of the American Society of Heating and Ventilating Engineers, followed with well chosen remarks, extending an invitation to all members of the association to join the engineering body, also an invitation to attend a meeting of the Boston local chapter on Thursday evening at the chapter rooms.

The report of standardization committee, read by chairman W. L. Fleisher of New York, summarized the work of the committee for the year and showed active effort still being carried on to standardize the roughing in dimensions and wheels of radiators and return line valves and roughing in dimensions of vacuum valves, establishing of data on heat loss calculating and recommending the approval of chimney code as originated and revised by the National Board of Fire Underwriters.

The balance of the morning session and all of the afternoon session was given over to the executive work.

On Thursday morning the Executive session was held.

THURSDAY AFTERNOON

General discussion of labor conditions and the installation of officers occupied the closing session.

RESOLUTIONS ADOPTED

The report of the Resolutions Committee resulted in expressing as the sense of the meeting the absence of any necessity or anything to be gained in the interests of the heating trade by licensing heating and piping contractors or journeyman steam fitters.

Another resolution expressed disfavor on the practice of submitted combined bids on heating and plumbing work and recommend separate proposals and contracts be made for these branches of the work. This was supplemented by a further resolution recommending the introduction of a bill in Congress requiring the separation of bids for the mechanical equipment in any project from the general building contract and requiring a separate contract to be let for each mechanical trade, that is, for heating and piping work, including ventilating, plumbing, automatic sprinkler work and electrical work, and that state and local associations endeavor to secure the enactment of such a law.

A further resolution recommended that a committee be appointed to make a study of the helper and apprentice situation and that this committee report at the next convention with its recommendations.

The final resolution recommended that the National Association adopt all necessary ways and means for the encouragement of the use of steam and hot water heating in residences, apartments, school houses and the like.

Opinions as to preference for open or closed shop were many and resulted in no change of policy. N.



PRESENT AT CONVENTION OF HEATING AND PIPING CONTRACTORS

William J. Olvany, contractor and engineer, New York; W. H. Driscoll, Long Island City; Richard B. Hunt, New York; W. L. Fleisher, New York; George W. Kenney, Boston; George Booze, Philadelphia; Daniel J. Rice, New York, and T. E. Nordbeck, Boston

Loring Danforth, Buffalo, George M. Getschow, Chicago, and Frank Howard, Boston, were elected to the Board of Directors for the three-year term.

The officers being installed, the convention stood adjourned.

ENTERTAINMENT

Besides the auto trip on Monday, on Wednesday evening about 250 delegates and guests were present and enjoyed a most delightful and informal dance at the Copley Plaza Hotel, as guests of the Boston local association.

June Meet of New England Golfers

The June meet of the New England Metal Products Golf Association was held at the Rhode Island Country club with a large delegation of the Massachusetts members visiting the Rhode Island members as guests. G. H. Collett and R. M. Greenlaw were the morning winners and Mr. Collett and W. F. Stearns took the afternoon prizes.

The scores were as follows:

	Morning	Afternoon
G. H. Bell	95 - 6 - 89	93 - 6 - 87
E. O. Chase	110 - 14 - 96	102 - 14 - 88
F. D. Cheesebore	116 - 20 - 96	121 - 20 - 101
G. H. Collett	81 - 2 - 79 (1st prize)	88 - 2 - 86 (1st prize)
H. L. Doten	114 - 12 - 102	113 - 12 - 101
W. J. Eddy	113 - 24 - 89	134 - 24 - 110
C. H. Ely	123 - 18 - 105	119 - 18 - 101
C. F. Glavin	128 - 24 - 104	135 - 24 - 111
R. M. Greenlaw	98 - 14 - 84 (2nd prize)	107 - 14 - 93
W. A. Griffith	112 - 16 - 96	118 - 16 - 102
F. W. Hubbard	113 - 20 - 93	117 - 20 - 97
J. S. Nicholl	114 - 12 - 102	109 - 12 - 97
H. D. Nickerson	105 - 14 - 91	106 - 14 - 92
S. B. Reed	106 - 14 - 92	113 - 14 - 99
R. E. Sargent	111 - 12 - 99	105 - 12 - 93
L. H. Stevens	No card	No card
L. W. Smith	103 - 14 - 89	106 - 14 - 92
W. F. Stearns	110 - 18 - 92	104 - 18 - 86 (2nd prize)
R. D. A. Thompson	No card	No card
W. H. Thayer	No card	93 - 6 - 87
H. W. Thorndyke	123 - 20 - 103	115 - 20 - 95
W. M. Trafton	No card
G. F. Uhler	133 - 30 - 103	136 - 30 - 106

Annual Convention of California State Association

Profitable Business the Subject of Trade Extension Bureau Talk
at Twentieth Annual Convention at Camp Curry, Yosemite Valley

The twentieth convention of the State Association of Master Plumbers of California was called to order at 10 o'clock, May 19, 1921, at Camp Curry, Yosemite Valley, State President Frank C. Schilling wielding the gavel. Owing to a slight dis-arrangement of the programme, the morning session which customarily is an informal welcoming graced with the attendance of the ladies was made a business session, and the open welcoming session was postponed until the afternoon, a sort of a necessary putting of the cart before the horse.

However, President Schilling, in a snappy straight to the point address called the convention to order, and announced that the Credential Committee, previously appointed, was ready to report progressively.

The Credential Committee's report showed that the full constitutional quota of delegates and alternates were present, indeed including numbers who were neither

of Mr. Bateman's discourse, at the conclusion of which, Past-president E. R. Wright of Los Angeles, chairman of the entertainment committee announced that the card party would take place in the evening, and that the Los Angeles Ladies Auxiliary had selected prizes. The gentlemen also announced that Past President Alex Coleman, of San Francisco was in charge of the ball for Saturday evening, and that that fact assured a highly enjoyable occasion.

In the afternoon, President Schilling in a happy train of expression, welcomed the ladies and friends and called attention to the fact that the 10 gentlemen on the platform were all past State presidents with still another in the audience.

In response to President Schilling's call, Frank J. Klimm of San Francisco, a past state president, and recently a member of the National Board of Directors,



CALIFORNIA STATE ASSOCIATION OF MASTER PLUMBERS AT ANNUAL CONVENTION AT YOSEMITE VALLEY, CAL.,
MAY 19, 20 AND 21

delegates nor alternates. The attendance at business sessions approximated 250.

The chair having dispatched routine business appointed the resolution, auditing and other working committees each of which proceeded with its duty. That was followed by the annual reports of the state treasurer and the state secretary, who, in a brief verbal report, recited the general finances of the association since his report of 1920.

Those preliminaries, each having been placed on its proper course, the chair then announced that by the kindly consideration of the Trade Extension Bureau, Mr. Bateman had been delegated to address the convention upon topics not only very interesting but of especial weight and value viewed from strictly a business view-point.

ADDRESS ON PROFITABLE BUSINESS

Mr. Bateman clearly outlined his conceptions and deductions on the problem of how to "Get Profitable Business" and pointedly recited the ways and wherefores, why so large a proportion of these carrying on a plumbing business, cut so small a figure in the Dun and Bradstreet commercial records. The convention listened very attentively until the hour of adjournment prior to which, a vote of thanks was unanimously carried in appreciation

delivered an address which, in a very instructive and pleasing way showed the way and value of co-operation.

Progressive reports of the several committees were received and customary course pursued. The chair announced that the annual reports of the treasurer and secretary had been found to agree and to be correct in all particulars, as also were the records and books submitted.

Several resolutions were presented and read by the secretary, and as is customary were passed to the Resolutions Committee without debate, to be reported back without prejudice.

President Schilling now read a well digested annual report in which he suggested several changes in procedure, relative to the condition of the affairs of the association by the executive officers, all with the view of expediting business. In as much as the president's suggestions were very much in the form of resolutions, therefore they were referred to the committee on resolutions, and were later approved of by the convention.

A comprehensive and clearly written report on the subject matter of the State plumbing law, one to substitute that which recently the state Appellate court declared unconstitutional was submitted and read by Past-president W. H. Graham of Oakland. While this report showed that notwithstanding the necessity for sani-

tary reasons of a state law, and notwithstanding the widespread expressions favoring a state law, and also the testimony evidencing the good and usefulness of the State law declared unconstitutional, the report showed that selfishly disposed interests were sufficiently powerful to thwart the efforts of those friendly to the desired State legislation.

Mr. Graham also submitted his report on the matter of the resolution passed at the last convention and pertaining to heating by artificial methods, such as steam, gas, hot water, warm air, etc.; the tenor of the report led to the conclusion that further investigation should be carried out, and in this conception, Mr. Graham's report was received as progressive.

Responding to the call of the chair, John Hokom of Los Angeles, and a National director, related his experience on an organization itinerary covering a large portion of the South. He stated that he found the lectures delivered by the representative of the T. E. B. highly entertained and valued by those addressed, he also found the lectures of large organizing value.

Considerable discussion followed the proposition that the name or title, "Master Plumber," shall be changed; but evidently, those advocating the change were very much in the minority.

The enlistment of sympathetic co-operation of all interests identified with the plumbing business inclusive of wholesale jobbers, and manufacturers with the plans and works of the Trade Extension Bureau was strongly advocated and approved of.

This convention certainly paid attention to business, and at 10 o'clock promptly on Friday, the president's gavel called for order and business proceeded.

A TALK ON ARTIFICIAL HEAT

In his discourse on artificial heat, Bateman covered his subject comprehensively, treating it from a sanitary viewpoint. He described and defined the life-giving and supporting chemical qualities of our natural ordinary atmosphere, and how it may be vitiated, and indeed, made deadly. Especially did he apply his reasoning to the heating of schools, where children most susceptible to insanitary environments, spend a large portion of their young lives. In his opinion there is very serious objection to much of the installation providing for heating by gas.

Answering question put to the chair, State Secretary John L. E. Firmin stated that by the adding of a rider to the State Law calling for the segregation of plumbing and heating and electric work, so as to put them on the market for open competition it was now absolutely discretionary with the state engineering department as to whether the work on the state building shall be done by day work, cost-plus, or by contract. Relative to the State building now being erected in San Francisco, he reported that the state is furnishing the material and employing the installing labor.

In accordance with appointment, Mr. Bateman again addressed the delegates, this time by blackboard demonstration. He showed the proven elements making up that strange animal once known as "running expenses," sometimes called "improductive expenses" but now generally known as "overhead" and unfortunately still quite over-the-head of comprehension of many engaged in the plumbing business.

The election of officers was taken up and resulted in the election hereinafter. The 1922 convention will be held in Sacramento.

Under the suggestion eloquently presented by Past-president James E. Britt of San Francisco, the convention expressed its sympathetic admiration and its sor-

row for the decease of the late Hon. Franklin D. Lane.

The affairs of the convention having been brought to a finish, President Dixon called for a rising silent vote of adjournment in respect to the memory of the late Hon. Franklin D. Lane.

In the features of entertainment, the ball of Saturday evening, under the guidance of Alexander Coleman of San Francisco, and George Stoddard of Berkeley assisted by a full corps of attendants was a most fitting and happy concluding function.

Of the approximately 500 attendants at the convention, more than half traveled in their autos, and arrived at Yosemite several days prior to the opening date, so that these were afforded full enjoyment of the Valley's wonders and beauties.

The officers elect are as follows, viz.:

President, H. Dixon, Sacramento.

Vice-president, D. A. Deacon, San Diego.

Treasurer, F. A. Wilson, San Francisco.

Members of the State Executive Board: John Hokom, National director, Los Angeles; A. R. Benedict, Pasadena; H. G. Newman, Oakland; F. C. Schilling, past-president, Los Angeles; John L. E. Firmin, State secretary, San Francisco; R. W. Mackie, secretary's assistant, San Francisco; Vincent W. Guercio, honorary assistant state secretary, Los Angeles.

Oregon Master Plumbers Meet in Portland

Many excellent talks on business matters featured the twentieth annual convention, of the Oregon Association of Master Plumbers, which was held in Portland, May 20 and 21. One hundred and fourteen members and forty of the ladies' auxiliary attended the sessions.

President Charles Fullman, Portland, called the meeting to order and B. D. Coffey, president of the Portland local, and Mayor G. L. Baker, welcomed the delegates to the city.

Harry L. Hanson, Butte, Mont., brought a message from the National Association, and J. C. Greenberg told about the work of the National Trade Extension Bureau. Three officers from the Washington State Association, President J. E. McCormack, Spokane, J. J. Ward, Seattle, and William Eckart, Seattle, made brief addresses.

The following committees were appointed:

RESOLUTIONS: C. S. Whitman, Portland; F. M. Sexton, The Dallas, C. E. Shumway, Eugene.

AUDITING: J. H. Hansen, Astoria, J. R. Widmar, Portland, William Wetzel, Forest Grove.

CREDENTIALS: A. J. Roy, Portland, Joseph Graber, Salem, F. W. Bishop, Baker.

The reports of the officers showed a good growth for the year, and an excellent financial condition. Resolutions adopted included the appointment of a committee to interest state, county and city officials in the need of public comfort stations along highways and near camping grounds; endorsement of the principle of the associated industries urging all to call for Oregon made goods in order to provide steady employment in the state.

The election of officers to serve for the coming year resulted as follows: President, Charles S. Whitcomb, Portland; vice-president, Thomas McKay, Seaside; treasurer, Ernest G. Ruedy, Portland; secretary, T. J. Rowe, Portland, Executive Committee, W. T. Finnigan, Portland, Zone 1; W. N. Smith, Astoria, Zone 2; A. L. Frazier, Salem, Zone 3; F. W. Bishop, Baker, Zone 4.

Seaside was chosen as the convention city for 1922 and Clarence S. Whitcomb was chosen as delegate to National Convention and T. J. Rowe, as alternate.

Plumbing Supply Trade Meet in Washington

Visit the President and Learn from Government Bureau
Business Conditions Are to Steadily Improve

Encouragement was given to the members of the Eastern Supply Association, which met in Washington on Wednesday, June 8, in order that they might show their support of the President who received them in a body and also to get first hand information from the Government Department on the business outlook.

The business session was opened by President A. M. Maddock who introduced the Reverend James H. Taylor who made the invocation. Thomas Bradley of the Washington Board of Trade welcomed the members to their city, as he called it, and from his position in trade and as president of one of the banks he was pleased to assure his hearers that the business situation was growing better all the time and that the money was available now for the various building enterprises. He was thanked in behalf of the membership by President Maddock who then introduced Thomas S. Holden, statistician for the F. W. Dodge Co., New York City.

Mr. Holden from statistics gathered from 26 states and by means of charts showed that business this year was approximately equal to that of 1919 and that no comparison should be made with 1920 which was an abnormal business year. The first six months were probably somewhat discouraging and yet they compared to great advantage over 1919. He believed from indications available that business would be decidedly better for the last half of the year and would show 11 per cent improvement for the first six months than the average for the 5 years not including 1920.

BUSINESS OUTLOOK BETTER

John H. Ihlder, of the Chamber of Commerce of the United States, complimented Mr. Holden on the information he had given and stated that individual building of homes was to be commended and that as favorable contracts could be made now before the rush as could be made later when doubtless there would be a rush to build after a period of hard sledding. Business is now taking an inventory of itself and too much stress has been placed on the financial side. The fundamental conditions are now good. The money in savings banks is more than \$6,500,000,000 or \$60 per capita, showing that the people in the country are in good condition. Many are still skeptical as to whether the bottom has been reached, but they do not realize that prices cannot come back to a prewar level but they will be normal prices for many years to come at a much higher level than formerly. There is no need for a spectacular boom and there is a certainty that the man who is conservatively optimistic will see a steady return of good business. The German reparations will greatly benefit all of the country in making available money that has been tied up. Home builders want the banks to loan money on the prewar percentage of valuation.

EDUCATE PEOPLE TO DEMAND BEST GOODS

The thing for many manufacturers to consider is: Are they educating the public to demand the type of house that requires your best products. The year 1920 has used a larger number of bathtubs than the 612,000 used in 1912, while so far in 1921 the indications show a much less demand for bathtubs, due to the abnormal demand in 1920 when many one family houses were

equipped for the occupation of two families and with a new bathroom. Now it should be the aim of everybody to encourage the erection of the one-family homes and better homes at a smaller cost can be built than the two and three-family homes. They are better for the children and better for the adults. Think in a term of several years.

EASTERN SUPPLY ASSOCIATION ABOVE CRITICISM

An attorney from the Lockwood Investigation Committee of New York City was then introduced and stated that it was a source of gratification to appear and show that the Lockwood Investigation Committee had found nothing in the records of Secretary Hanley after three days' on the witness stand that could be criticised, nor was there any suggestion to be made for a different conduct of the association. He said, "I am here because Mr. Hanley, your secretary, wanted something to show you that your association has been found free from all cause for regulation or readjustment and it is a pleasure to say that as the result of our joint work your secretary is to be encouraged rather than censored."

SECRETARY HANLEY SUPPORTED

H. W. Thorndike then rose and stated that Mr. Hanley had been criticised for being secretary of a number of other organizations and it was his pleasure to speak for the board that Mr. Hanley had acted as secretary for nothing which he had not been recommended to do by the board.

The following new members were then elected: New Haven Plumbing Supply Co., New Haven, Conn.; George P. Jacobs, Brooklyn, N. Y.; Robbins, Gamwell Co., Pittsfield, Mass.; Eastern Plumbing Supply Co., Hartford, Conn.; Purcell-Cox Corporation, Hartford, Conn.; J. T. O'Connell, Newport, R. I.; Cambridge Plumbing Supply Co., Cambridge, Mass.; Baltimore Plumbing Supply Co., Baltimore, Md.; Bingham & Taylor, Buffalo, N. Y.; Perrigo, Inc., New Haven, Conn.

A vote of thanks was given to the Washington members for making the arrangements for the meeting. The general business discussion was then taken up by different members.

REVIEW OF TRADE CONDITIONS

A representative of the United States Manufacturing Co., speaking on enameled iron goods, stated that there had been an improvement in the past two weeks and indications pointed to low stocks and with the materials at the present cost and labor at the present wages, prices quoted had anticipated some cuts and there was little possibility of further price concessions. Plants run at low capacity interfered with low productive cost on account of the overhead expense having to be spread over the lower output and was not profitable.

G. R. Adams said that some jobbers look for a rebate on the 60-day guarantee and are making price accordingly, looking for a drop in the price before the 60 days are out. Is this regarded as a safe practice?

In reply it was stated that the wisdom of the guarantee was open to question, the method of trading on the hope of a reduction was to be deplored but that guarantees would be made good.

E. S. Aitkin, of Trenton Potteries, Co., stated that pottery plants are running from 30 to 50 per cent. His concern does not believe in price guarantees and does not expect any great demand in 1921 although the demand for homes has increased recently.

A. M. Maddock then stated that potteries are not restricted as to selling prices or policies. Each pottery is free from any agreement and is a free agent to quote whatever prices it desires.

W. Griffiths, of Central Foundry Co., stated that soil pipe was being marketed at a loss but there was no agreement among soil pipe makers as to the prices that were quite generally being made.

Mr. Walker, of Republic Iron & Steel Co., said that mill operations were 30 per cent and that shipping had been about 50 per cent from stock. The demand for pipe from the oil fields had now slumped off but the demand for butt weld pipe is good in assorted cars. The questions in front of the manufacturers of steel products were the difficulties in getting a wage scale reduction that would be fair to all concerned.

L. O. Koven stated that prices on range boilers were guaranteed up to July 1 and that coal was lower for manufacturing purposes and the price of sheet steel was uncertain.

A. D. Bowers, of the American Pin Co., Waterbury, Conn., spoke of mills running at but 40 per cent and cutting up stock at 50 per cent. There has been considerable improvement in business during the last month. Indications are that jobbers' stocks are low and that raw stock is liquidated. The price is not likely to go down with labor and material at its present level.

H. W. Thorndike stated that conservatism is the course that will be best for 1921, though the hopes of the optimist that 1919 will be repeated may be realized as the prices are still high with stock less.

J. H. Borton of the Haines, Jones & Cadbury Co., Philadelphia, cited conditions in the flour mill and other industries showing that they were nothing like as bad in the plumbing supply industry.

George E. Keenan stated that jobbers were selling the market short on fixtures with a guaranteed price and that the roughing material for jobs was lower than the prices of fixtures which was not fair to the roughing in material. It would be necessary to get on a fairer basis.

R. A. Tate, Utica, N. Y., said that we are doing a country trade within 10 per cent of last year. He believed that we are back to normal and a wrong view prevails of what is now normal. The new normal will be very much higher than the former level of normal rates. Country trade is the best buyer at the present time. We must be better salesmen and salesmen must have courage to turn down a cut price order. Crooked salesmanship makes crooked jobbers. We cannot blame manufacturers for everything and must take some things on ourselves. We must get back into the Golden Rule spirit of the fair deal.

VISIT TO PRESIDENT HARDING

James A. Messer then explained what was necessary in making the visit to the White House and a call on the President. The meeting then adjourned and the members formed into line and went into the White House where they were greeted by President Harding and they had the satisfaction of personal visit with the President.

On their return to the New Willard Hotel a fine repast was served and afterwards automobiles were provided for the ladies to make a tour around Washington and entertainments of various sorts were engaged in by the men.

Annual Convention of the National District Heating Association

A very entertaining and instructive time is promised to all who attend the twelfth annual convention of the National District Heating Association, to be held at the Breakers Hotel, Cedar Point, Ohio, on June 22, 23 and 24. In addition to the business program, which follows, there will be water sports for all, informal dancing and the annual banquet on Thursday evening.

Reservations for rooms should be made directly with the Breakers Hotel, where special rates have been made.

PROGRAM

Wednesday, June 22, 10 o'clock a. m.

President's Address

Secretary-Treasurer's Report

Appointment of General Convention Committee

Appointment of Nominating Committee

Paper—"Report of Public Policy Committee," D. L. Gaskill, Chairman

Wednesday, Afternoon Session, 2:30 o'clock p. m.

Report of Auxiliary Gas and Heating Committee, H. H. Clark, Commonwealth Edison Co., Chicago, Ill.

Report of Heating Research Committee, J. J. Donnelly, Donnelly Systems Co., New York City

Report of Meters and Accessories Committee, R. C. March, Public Service Co. of Northern Illinois, Chicago, Ill.

Report of Nominating Committee

Thursday, June 23, 10 o'clock a. m.

Paper—"Does the Installation of Electric Generators in Connection with Steam Heating Pay?" J. C. Hobbs, Alleghany Heating Co., Pittsburgh, Pa.

Paper—"Experience with Non-Condensing Turbines in Industrial Heating Work," R. D. DeWolf, Rochester Gas & Electric Corp., Rochester, N. Y.

Report of Station Operating Committee, F. B. Orr, Illinois Maintenance Co., Chicago, Ill.

Thursday, Afternoon Session, 2:30 o'clock p. m.

Symposium on Mechanical Stokers and Their Performances
Paper—"Use of Pulverized Coal," H. D. Savage, Combustion Engineering Corp., Chicago, Ill.

Paper—"Advantages of Central Station Heat," L. J. Pauley, Manager Guardian Building, Cleveland, O.

Friday, June 24, 10 o'clock a. m.

Report of Committee on Rates, F. A. Newton, Commonwealth Power Co., Jackson, Mich.

Paper—"Hot Water Rates," R. A. Heitbrink, General Service Co., Elwood, Ind.

Report of Educational Committee, J. H. Walker, Detroit Edison Co., Detroit, Mich.

Friday, Afternoon Session, 2:30 o'clock p. m.

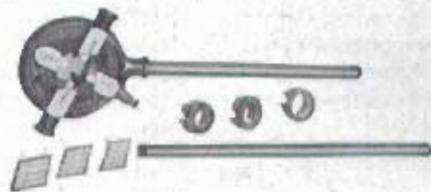
Paper—"Customers' Installations," W. J. Kline, North Tonawanda, N. Y.

Paper—"Central Station Heat from the Viewpoint of the Building Manager," E. S. Shultz, Mgr. Illinois Maintenance Co., Chicago, Ill.

Election of officers.

Adjustable Ratchet Threading Device

Illustrated is the Toledo No. 1A adjustable ratchet threading device, manufactured by the Toledo Pipe Threading Machine Co., Toledo, Ohio. It has a ca-



TOLEDO NO. 1A THREADING DEVICE

capacity of 1 to 2 in. pipe inclusive and may be used with two handles as an ordinary die stock or with one handle inserted in the ratchet case. This is an ideal jobbing tool as when threads are necessary to be cut in trenches, against walls or in other tight places the ratchet adjustment allows of it being done easily and quickly. It is constructed ruggedly.

Brass Manufacturers Meet in Buffalo

A busy two-day session was held by the National Association of Brass Manufacturers, June 2 and 3, in the Iroquois Hotel, Buffalo, N. Y. Figures of plant operations of members showed business about 50 per cent of normal, comparing the first half of this year with the corresponding period of 1920.

Reports were made by the Committee on Standardization, and also by the Water Works Division of this committee. Requests were made, and concurred in, by all potteries, with one exception, that the thickness of lavatories at the opening of faucet hole be not over $1\frac{1}{8}$ in. and an additional request that the punchings or holes for basin, cocks and wastes be not smaller than $1\frac{3}{8}$ in.

Commissioner William M. Webster was directed to take a referendum vote from all manufacturers and jobbers in the United States and Canada, and from non-members in the water works line, as to their preference in the adoption of the piece or dozen list in the forthcoming official catalogue.

Delegates were appointed to attend the convention of the Water Works Superintendents of the American Water Works Association, which will be held in Cleveland this week. The metric system came up for discussion, but no action was taken by the delegates. The financial statement of the association showed that it was in excellent condition, and reported the purchase of several interest bearing bonds for the reserve fund.

The following resolution was unanimously adopted:

Whereas, a great many, if not the vast majority of commercial or business organizations are formed and operated on safe, sound and law abiding principles, and for fair and useful purposes, and

Whereas, at the time when speedy mobilization of goods for war purposes, was an essential factor, our government then found that organization manufacturers were a most useful and helpful agency in the achievement thereof, and if a useful factor in times of war and stress, should be an equally helpful and potential agency in times of peace.

Therefore, be it Resolved, That the National Association of Brass Manufacturers in convention assembled, respectfully submit for the careful consideration of Secretary of Commerce Hoover, the establishment of a Bureau within his jurisdiction, where all merchants and manufacturers may confer and ascertain what they may do within their legal rights, and

Be it Further Resolved, that this association, through its proper offices and Committees, enlist the aid and assistance of all similar and kindred organizations in the furtherance of the purpose of these resolutions.

President A. L. Fischer pointed out that it might not be out of place for other members to take up the suggestion and spirit voiced in the resolution, with any organization, civic, social, fraternal, commercial or other organization with which they may be identified.

The next meeting of the association will be in Cleveland, Ohio, September 14 and 15, 1921.

News from Florida

Over a quarter of a million dollars will represent the building construction of the Palm Beaches, according to permits already issued, and those that will be recorded in the next few days. Already Palm Beach permits amounts to \$88,500; West Palm Beach, \$151,600.

John F. Dobler will build at Gulf Port a \$60,000 hotel having 41 bedrooms and baths.

J. B. Paine will build a new hotel on the north side

of Stephenson's Creek in Clear Water, having given up all other plans to push this building to completion.

In Plant City a two-story office building will be erected by W. E. Lee. He is also planning to wreck the old wooden hotel and in lieu thereof build a handsome brick or concrete building.

A twenty-four apartment house will be built in Miami, corner Ocean Drive and Second street. The architect is W. C. Garmo and the builder is M. D. Sammons. The building will cost \$55,000.

The J. J. Quinn & Co., Miami, was awarded the contract for the laying the sewer in the different parts of Miami at a cost of \$109,807.58.

The Atlantic Laundry Co. will build in Miami a \$25,000 building, will buy \$50,000 in machinery. The company is capitalized at \$100,000.

Achievements of Trade Extension Bureau

(Continued from Page 375)

a high grade fixture at the list difference between the high grade fixture and the staple line. This must be corrected for the good of the public as well as the contractor.

Last, but not least, this overhead chart is the best evidence in the world that this association, as well as the Bureau, is opposed to uniform prices or fixed prices. We believe that every dealer should stand upon his own selling ability and that price is the last link in the sales chain. If his service is worth his charge the public will buy.

Price fixing cannot be founded upon any thing other than false conditions. It requires an agreement which is intended to bind men to that which they know is not based upon a true foundation. They sometimes work for a while but finally explode because the extreme thing is attempted. Then when the agreement is annulled, the average price drops so much that the public realizes it has been badly dealt with.

There is only one way of legitimately overcoming destructive and disastrous price making in this or any other industry and that is first to teach those engaged in the business the elements that go to make up a price and second to point out to them where and from whom business can be obtained.

This schooling is the function of the local association and until the officers of our associations realize this fact, conditions are not going to be permanently improved.

The National Association, through this Bureau, is providing the local associations with ample material to conduct a school of the most efficient type. You have at your disposal an institution with office space and files covering 6400 ft. or the entire half floor of a large office building. In these offices are 26 persons collecting and turning out information of every type for the plumbing and heating contractor.

Besides this we have men on the road constantly picking up information, lecturing and spreading information to the trade. I sometimes wonder if many of you truly appreciate what your national association is really doing for you with the small per capita you are paying for dues.

At any rate time will convince you that they are building a structure that will make this a powerful, and profitable industry, and one that stands in the front ranks of American business, and the only fellow who will have a kick coming in the future is the fellow who invariably is too busy to take advantage of that which the National Association is offering them at this time. He will wake up when it is too late.

THE MARKET

New York Comment

PLUMBING GOODS

At the meeting of the Eastern Supply Association in Washington, D. C., it was brought out that the stocks in the hands of jobbers in various kinds of plumbing goods were small which will naturally have a strengthening effect on the market. The reports of trade conditions from different kinds of manufacturers also indicated no accumulation of stock was being made and that much that was being sold was sold at a loss to the producers. There are indications of better buying and more activity in home building and there is some feeling that the prices now obtaining are the new normal level and that the old level of prices will not be reached again for many years, if ever. A representative of the Chamber of Commerce of the United States stated that home building was on the increase and the general outlook for improvement in the business world was promising.

HEATING GOODS

There has been no change in the price of radiation but in the price of boilers there has been a drop of 12½ per cent for small round boilers, 7½ per cent for sectional boilers and 10 per cent for tank heaters. Heating goods stock is not being accumulated and the reports are that in the pipe market there is a slump in demand for it from the oil field and that there is an increased demand for butt weld pipe. Brass goods are also being sold at about the lowest level that may be expected. There is a general feeling that for the latter part of the year business will be better and that those who have stocks in warehouses can dispose of them at a profit on the present level of cost.

Chicago Comment

A better feeling is in evidence in the local trade, as hearings on the building trade controversy have been started before Federal Judge K. M. Landis, who was unanimously selected as arbiter, with full power to settle questions which have tied up building in Chicago since May 1. Men in the supply trade believe that a speedy settlement will be effected, and that a good volume of business will result. There is no indication of what the future wage scale will be, but it is believed that a satisfactory arrangement can be made that will please all factors.

That people are prepared to build, is manifest in the number of permits for residences and apartments, issued in Chicago during the month of May. The building commissioner recently announced that nearly 1400 permits for single residences, and permits for apartment buildings containing 1550 flats have been authorized since the first of the year.

Real estate men report a very active interest in suburban property, and in many adjacent towns building has been quite brisk.

Further price reductions have been announced by manufacturers of plumbing and heating goods, and job-

bers' prices have been revised accordingly. The American Radiator Co. announces new prices for round, sectional and hot water supply boilers, the new prices being 12½, 7½ and 10 per cent lower respectively. Some makers of sanitary pottery have reduced their goods about 10 per cent. Business has been quiet, though in recent weeks an encouraging increase has been noticeable. The outlook for the last half of the year is considered better than for the first half, in the opinion of men in the trade.

Pig Iron—Production statistics for May show the low ebb of operations in the trade, but in local circles developments of the past week have encouraged the industry to foresee an early recovery. Prices for No. 2 foundry are \$22 to \$22.50 per ton, with little demand, but a little freer specification against contracts reported. Buyers are filling their requirements at prices quoted, but their attitude indicates that they anticipate the possibility of lower quotations.

Copper—Buying is small, and production is steadily falling. A decrease in the large surplus is expected, though imports have been rather heavy. For small lots in Chicago dealers quote Lake Ingot at 14½ cents.

Tin—Prices for this metal in Chicago have been revised following the break in wholesale prices. The market is very quiet, and dealers quote straits pig at 32½ cents.

Lead—There is little buying in this market, and producers have reduced their prices so that in Chicago pig lead is quoted at 5 cents per pound. There is some activity in white lead, but little buying otherwise.

Zinc—Consumption of this metal is small, and output is at a decidedly reduced rate. A large surplus exists, and present prices are below cost of production, even when considering the very low price of ore. Zinc in slabs is quoted at 5 cents by Chicago dealers.

Pig Iron

Quietness is characteristic in the pig iron market with the prices down 50 cents to \$1.00 per ton and new prices coming out where sales are made and showing concessions.

NEW YORK

East Pa. No. 1 fdy	Sil 2.75 to 3.25	Per Cent.....	\$28.52 to \$29.52
East Pa. No. 2X fdy	Sil 2.25 to 2.75	"	"..... 27.52 to 28.52
East Pa. No. 2 fdy	Sil 1.75 to 2.25	"	"..... 26.52 to 27.52
Buffalo Va	Sil 1.75 to 2.75	"	"..... 32.46 to 33.46
Virginia No. 2	Sil 1.75 to 2.25	"	"..... 31.16 to 32.16

CHICAGO

Northern Coke fdy No. 1	Sil 2.25 to 2.75	Per Cent.....	22.00 to 22.50
Northern Coke fdy No. 2	Sil 1.75 to 2.25	"	"..... 21.50 to 22.00
Southern Coke fdy	Sil 2.75 to 3.25	"	"..... 32.67
Southern Coke fdy	Sil 2.25 to 2.75	"	"..... 30.92
Southern Coke fdy	Sil 1.75 to 2.25	"	"..... 27.67

PHILADELPHIA

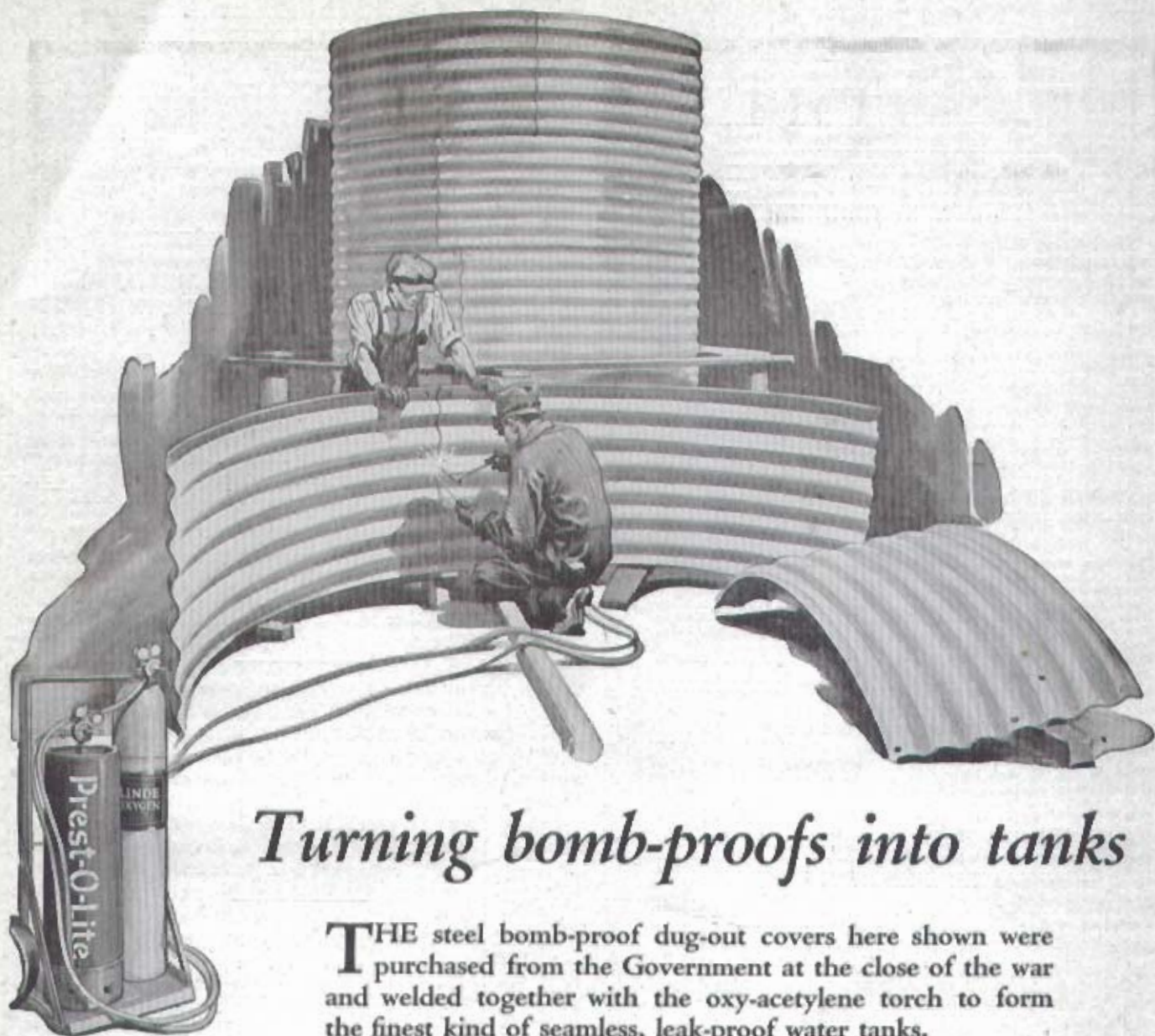
Eastern Pa. No. 2 Plain	Sil 1.75 to 2.25	Per Cent.....	\$24.75 to \$25.25
Eastern Pa. No. 2X	Sil 2.25 to 2.75	"	"..... 25.50 to 26.50
Virginia No. 2 Plain	Sil 1.75 to 2.25	"	"..... 31.74
Virginia No. 2X	Sil 2.25 to 2.75	"	"..... 32.99

CLEVELAND

Northern No. 2 fdy	Sil 1.75 to 2.25	Per Cent.....	\$24.50
Southern fdy	Sil 2.25 to 2.75	"	"..... \$29.92 to 29.92

CINCINNATI

Southern Coke	Sil 1.75 to 2.25	Per Cent (base price)	\$26.50
Southern Coke	Sil 2.25 to 2.75	" (No. 2 Soft)	27.50
Southern O. No. 2	Sil 1.75 to 2.25	" (No. 2)....	25.52



Turning bomb-proofs into tanks

THE steel bomb-proof dug-out covers here shown were purchased from the Government at the close of the war and welded together with the oxy-acetylene torch to form the finest kind of seamless, leak-proof water tanks.

The ready portability and uniform purity of

Prest-O-Lite

DISSOLVED ACETYLENE

contribute largely to making such jobs successful and profitable.

The tremendous demand for Prest-O-Lite Dissolved Acetylene has brought into being the nation-wide Prest-O-Lite Service which insures welders and cutters of a constant supply of pure gas anywhere in any quantity.

THE PREST-O-LITE COMPANY, Inc.

General Offices: Carbide and Carbon Building, 30 East 42nd Street, New York

Balfour Building, San Francisco

In Canada: Prest-O-Lite Co. of Canada, Limited, Toronto

PW-509-21

Old Materials

Scrap Iron, New York—Inquiry has practically ceased and stagnation is the rule. Prices which dealers in New York and Brooklyn are quoted to local foundries, per gross ton:

No. 1 machinery cast	\$16.00 to \$17.00
No. 1 heavy cast columns, building materials, etc., cupola size	15.00 to 16.00
No. 1 heavy cast not cupola size	10.00 to 11.00
No. 2 cast (radiators, cast boilers, etc.)	10.00 to 11.00
Iron and steel pipe (1 in. diam., not under 2 ft. long)	8.00 to 8.50
Stove plate	9.00 to 9.50
Country Mixed	10.00 to 11.00

Scrap Iron, Chicago—The spurt of last week is sloping off and movement of material is further held up by the strike of foundry workers. Following are Chicago dealers' prices per gross ton in car load lots:

No. 1 Cast	\$15.50 to \$16.00
Cast Borings	5.00 to 6.00
Machine Shop Turnings	3.50 to 4.00
Stove Plate	14.00 to 14.50
Grate Bars	11.00 to 11.50
Railroad Malleable	10.00 to 14.50
Agricultural Malleable	14.00 to 14.50
Country Mixed	7.50 to 8.00
No. 1 Busheling	10.00 to 11.00
Hydraulically pressed, h. s. scrap	8.00 to 8.50
Champion bundles, h. s. scrap	6.00 to 7.00

Scrap Iron, Pittsburgh—An upward tendency has been checked by a let up, in the buying but quotations show advances. Dealers quote:

Cast iron wheels	\$14.50 to \$15.00
Machine shop turnings	8.25 to 8.50
Sheet bar crop ends (at origin)	14.00 to 15.00
Short shoveling turnings	9.50 to 10.00
Heavy breakable cast	14.50 to 15.00
Stove plate	12.50 to 13.00
Cast iron borings	9.00 to 9.50
No. 1 railroad wrought	12.50 to 13.00

Scrap Iron, Boston—Improved conditions are reported in steel but the rest of the market shows little advance in prices although the tendency is to more firmness all 'round. Dealers are nominally paying as follows:

Wrought No. 1, yard long	\$ 7.50 to 8.00
Horse shoes	8.00 to 9.00
Stove plate	11.50 to 12.00
No. 1 machinery	16.00 to 17.00
Breakable cast	14.00 to 15.00
Bundled barrel hoops	4.00 to 5.00
Wrought iron pipe	6.50 to 7.00
Eteel rails	9.00 to 10.00
Heavy melting steel	6.00 to 7.00
Turnings, machine shop	3.00 to 3.50
Car wheels	14.00 to 15.00
Car axles, steel	14.00 to 15.00
Cast borings	3.00 to 3.50

Old Metals, New York—Although an easier tone prevails, the market is very sluggish. Dealers' buying prices are nominally as follows:

	Cents Per Lb.
Copper, heavy and crucible	10.50
Copper, heavy and wire	9.75
Copper, light and bottoms	8.00
Brass, heavy	5.75
Brass, light	4.00
Heavy machine composition	9.50
No. 1 yellow brass turnings	5.00
No. 1 red brass or composition turnings	7.50
Lead, heavy	4.00
Lead, tea	3.00
Zinc	3.00

Old Metals, Chicago—Little fluctuation in prices is apparent though business shows a little improvement.

Red Brass	7 1/2
Yellow Brass, heavy	5 1/4
Yellow Brass, light	4
Copper, heavy and Clips	8 1/2
Lead Pipe	3
Tea Lead	2
Tin Foil	20
Black Tin Pipe	23
Pewter No. 1	18
Zinc	2
Soldered Joints	2
Auto Radiators	4

Old Metals, Boston—Improved conditions in red metal are reported although buying is not yet heavy. White metals have shown slight improvement and tin has taken an advance. Dealers are nominally paying as follows:

Heavy crucible copper	\$10.50 to 10.75
Heavy scrap copper	10.00 to 10.50
Light copper	8.00 to 8.50
Heavy mch. comp. red brass	10.50 to 10.75

Brass turnings No. 1 rod	5.00 to 5.50
Comp. turnings	6.75 to 7.25
Zinc scrap	3.25 to 3.50
Heavy lead	3.75 to 4.25
Heavy brass	5.25 to 5.75
Light brass	4.00 to 4.25
Pewter No. 1	17.00 to 18.00
Clean cast aluminum	10.00 to 11.00
New aluminum clippings	11.00 to 12.00
Old and painted aluminum	10.00 to 11.00

Old Rubber—Market still waiting some sales of boots and shoes and occasionally some tires. Wholesale dealers' buying quotations are:

Boots and shoes	2 1/4 to 3 1/4
Trimmed Arctics	2 to 2 1/4
Auto tires	1 to 1 1/4
Bicycle tires	1/2 to 1 1/4
Solid tires	1 1/4 to 1 3/4
No. 1 inner tubes	5 to 6
Mixed white scrap	2 1/2 to 3
Mixed red scrap	3 to 3 1/2
Mixed black scrap	1 to 1 1/2
Cotton fire hose	1/2 to 1
Garden hose	1/2 to 3/4

Old Rags—The volume of business has again become small but there is some firmness. Wholesale dealers' prices quoted are:

No. 1 Whites	\$4.00 to \$4.25
No. 2 Whites	3.90 to 4.15
Thirds and Blues	.90 to 1.10
Straight Garments	.65 to .75
Hard Back Carpets	.45 to .55
Soft Back Carpets	1.75 to 2.00

Paper Stock—There are evidences of strength coming to light and some advances. Wholesale dealers' buying quotations for New York are:

Over issue magazines	\$.80 to \$.90
Crumpled news	.25 to .30

Chicago Men Out to Catch Fish

With plenty of tackle for a big catch, eight Chicagoans left the city June 17 for 10 days at Ballard Lake, Wis. The men in the party are: Charles Glennon, secretary of the Chicago Master Steam Fitters' Association, Frederick Wilzer, George A. Henrichs, Frank Mellish, Charles Hebner, Tom Tagney, J. J. Storey and J. H. Storey, Chicago manager of L. J. Mueller Furnace Co.

Boilers for Large Heating Tax

A campaign for more boiler business is being conducted by the Harrisburg Star Boiler Corporation, 50 Church street, New York City, and one letter calls attention to some of the special features of its construction. It is a water tube plate boiler made both of the standard type to burn anthracite or bituminous coal and the down draft smokeless type for the other type of bituminous coal and with both it is represented to be a quick steamer, particularly adapted for schools, theatres, churches and public buildings where the demand for steam must be met quickly. It is entirely self contained, consequently easily installed and requiring very much less space than the ordinary plate boilers as it is a water tube boiler and will give a high evaporation. These are some of the things which are brought out in the letter which is accompanied with a postal card so that those who desire further information may apply for it direct.

Alden E. Smith Now Connected with W. A. Ebinger Sanitary Mfg. Co.

Aden E. Smith, formerly State Inspector of Plumbing and Chief of the Bureau of Plumbing, State Department of Health of Ohio, has accepted a position as sanitary engineer for the D. A. Ebinger Sanitary Manufacturing Co., of Columbus, Ohio, in charge of its Service Department.

Boston Plumbing Company Purchases Building

Gannon & McKnight, plumbers, have removed their plumbing shop from 63 High street to the building recently purchased at 248 High street, Boston, Mass.

New Quarters for Marlboro Plumber

Austin McRae, for a number of years a plumber in Marlboro, Mass., has leased new quarters at 20 Main street and occupied them June 1.

Removal of Lawrence, Mass. Plumbing Shop

Hancock Brothers have opened a plumbing, heating, ventilating, roofing and sheet metal working establishment at 38 Water street, Lawrence, Mass.

New Committees of Massachusetts Association

President R. V. Worthen of the Massachusetts Association of Master Plumbers has appointed the following committees, as authorized by the association at its recent annual meeting:

Board of Directors—Ex-President G. Wilbur Thompson, Newton; Charles F. Peck, Greenfield; William Milne, Pittsfield; Thomas M. Farrell, Brockton; Daniel F. Loane, Worcester; J. S. Kinsman, Framingham; Andrew McGlynn, Taunton; George E. Ryan, Lynn; P. W. Donoghue, Boston; ex-President Daniel Carroll, Lowell, and W. J. Hyland, Springfield.

Conference committee—G. W. Thompson, Newton; D. F. Carroll, Lowell, and J. Preston Perham, Boston.

Legislative committee—John J. Mullaney, Lowell; National ex-President James S. Cassidy, Cambridge; ex-President Andrew F. Curtin, Medford; J. B. Feehan, Lynn, and Edwin C. Kelley, Boston.

Essay committee—R. E. Dockham, Salem; Harry Lloyd, Springfield; E. C. Kelley, Jr., Boston; H. W. Orr, Newton, and Walter Skinner, Braintree.

Sanitary Committee—L. E. Andrews, Gloucester; D. J. Whooley, Fitchburg; John J. Hickey, Worcester; J. H. Reynolds, Stoneham; W. B. Wolcott, Newton, and George A. Stewart, Lowell.

Under the plan adopted, the new board of directors will have greatly increased duties this year, for each will be in personal charge of a certain district of the state, the state having been divided into ten districts. It will be their duty to look after matters in general in their district, organize locals where such do not now exist, build up the membership in both the local and state organizations, attend important meetings of the locals in their district, etc. It is planned to thus keep all sections of the state in close touch with the work being done by both state and national associations.

VOGEL

PATENTED

FROST-PROOF CLOSETS

are helping plumbers to build bigger business from existing buildings

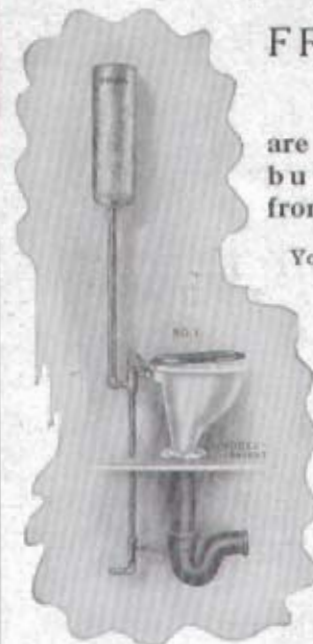
Your customers who are postponing new building operations will be glad to avail themselves of the convenience of the VOGEL in unheated places, such as the garage, back porch or yard.

You can meet this demand with the VOGEL. It is simple to install. All ready assembled and tested when you get it. No pit needed.

Ask your jobber or send to us for catalogue.

Jos. A. Vogel Co.

Wilmington
Delaware



Death of George E. Gilchrist

George E. Gilchrist, president and treasurer and principal stockholder of the George E. Gilchrist Co., dealers in iron pipe and plumbing supplies, 106 High street, Boston, Mass., died at his home, 148 Bellevue avenue, Melrose, Mass., on Memorial Day.

In 1901 the company was incorporated as the George E. Gilchrist Co. and has won a high place in the trade. Mr. Gilchrist was a director of the Citizen's National Bank of Boston, a trustee of the Melrose Y. M. C. A., active in the First Congregational church of his home city, a member of the Masons, Odd Fellows, Boston City club, Exchange club, American Art society, Amphion club and many other organizations.

He leaves a son, Warren Erwin Gilchrist of Berkeley, Cal., and two daughters, the Misses Olive B. and Anna T. Gilchrist of Melrose, and two grandchildren.

Dates of Coming Conventions

June 22, 23, 24, 1921—District Heating Association, twelfth annual convention, Breakers Hotel, Cedar Point, Ohio.

September 6, 7 and 8, 1921.—Annual meeting of the American Society of Sanitary Engineering, Cincinnati, Ohio, with headquarters at the Hotel Gibson.

JOHN A. MURRAY & SONS, Inc.

"The House of Reliability"

Plumbing and Heating Material of Quality

Tel. FitzRoy 0640

310-312 WEST 39th STREET, N. Y. CITY

Auto Delivery Service to Suburban Trade

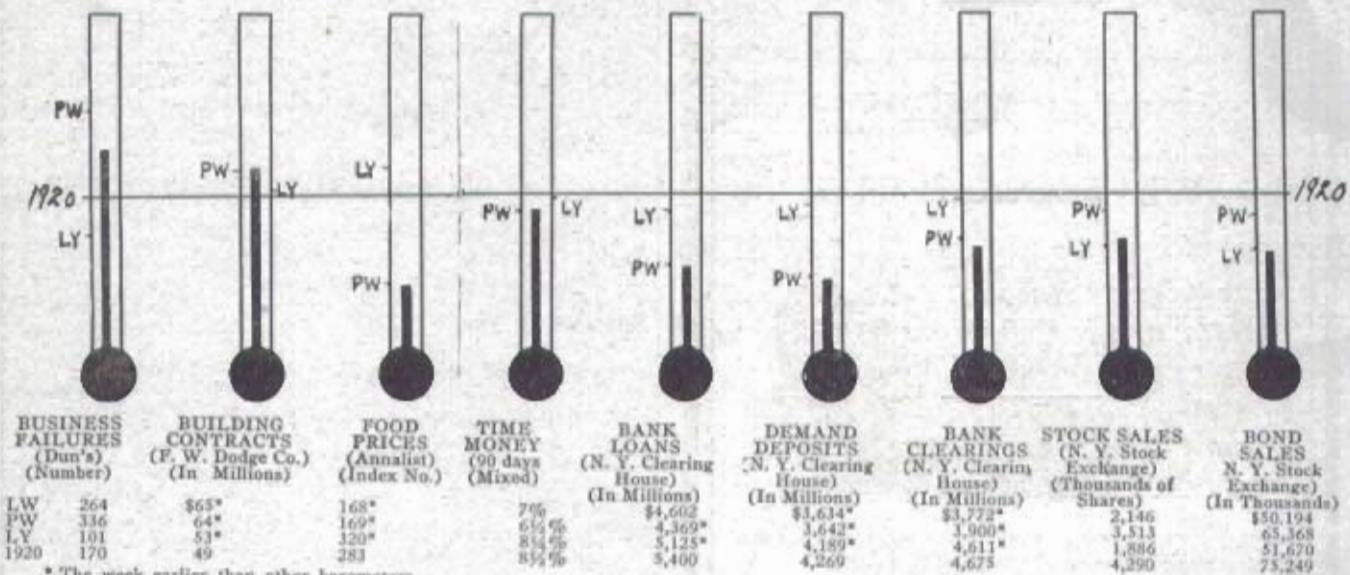
Please mention PLUMBER AND STEAM FITTER when you write.

The Barometers of American Business

Week Ending June 3, 1921

(Copyright by THE STREET, Inc.)

LW—Last Week (Shown by level of mercury in tube). PW—Previous Week. LY—Corresponding Week Last Year. 1920—1920 Weekly average, taken as normal.



Summary of the Week's Developments

Business failures for the week show a reduction, on account of the holiday, and are only 264, says *The Street*. This total compares with 336 for the six-day period last week, or a decrease of 72, and with 315 defaults two weeks ago. During this week of last year, when the statement also included figures for five days, only 101 insolvencies were reported to R. G. Dun & Co. The number of failures involving \$5,000 or more of liabilities in each case this week is 141, representing 53.4 per cent of the total number. Of the 336 defaults last week, 195 had an indebtedness of \$5,000 or more in each case, or 58.0 per cent of the total. A year ago, the ratio of such insolvencies was 49.5 per cent.

Business conditions show practically no improvement. On the other hand there is no adverse factor to denote a change for the worse and where the conditions remain in status quo the sum total of opinion would be rather optimistic.

The serious feature throughout the whole United States is in connection with the holding off of the retailers in reducing prices and the universal command to purchasing departments to refrain from buying for future stocks.

This condition of inertia while apparently disadvantageous for the immediate must in the end create an abnormal market when stocks of necessity must be laid in. This condition of abnormality is likely to occur in the fall of the year. At this time it is likely to bring about an unfortunate physiological condition for the abnormality may be taken by sellers as a basic condition of supply and demand.

Should this condition be esteemed a fundamental one there should be a general competitive bidding which will force prices too far upward.

Credit conditions can hardly be expected to ease up nor can frozen credits be thawed out to any degree until the machinery for international trade is better adjusted.

The wheat market suffered a reaction after an early

upturn; sugar and cotton prices both closed a few points lower than last week and coffee went up slightly. Iron and steel continues dull with no prospects of changing during the summer.

The Credit Clearing House report for the week ending June 3 shows a slight increase in purchases. The statement in details follow:

	Purchases	Indebtedness	Payments
UNITED STATES			
Week before	M2.5	—2.2	M1.1
Year ago	—3.9	M2.4	—2.0
Two years ago	—2.8	M2.3	—2.1
PACIFIC COAST SECTION			
Week before	M4.0	—2.3	—0.8
Year ago	—7.2	M5.4	—7.8
Two years ago	—5.0	M5.3	—2.7
MOUNTAIN SECTION			
Week before	—3.2	—4.2	M13.8
Year ago	—3.7	M6.0	M4.8
Two years ago	—8.3	M5.5	M6.7
NORTH AGRICULTURAL SECTION			
Week before	M5.3	—0.7	—10.8
Year ago	M0.4	M7.2	—20.2
Two years ago	—3.2	M0.7	—13.0
MIDDLE AGRICULTURAL SECT.			
Week before	M3.5	—1.8	M0.8
Year ago	—4.7	M0.8	—4.2
Two years ago	—4.3	M1.9	—5.4
SOUTH AGRICULTURAL SECTION			
Week before	M0.1	—3.1	M1.7
Year ago	—6.6	M0.3	—11.5
Two years ago	—3.4	M0.6	—9.9
EAST SECTION			
Week before	M3.4	—2.1	M2.2
Year ago	—2.1	M3.7	—6.3
Two years ago	—0.7	M5.1	—11.3

Death of Michael E. Conran

MICHAEL E. CONRAN, president M. E. Conran Co., Brooklyn, pipe and fittings, died May 25.

The Repair-Man's "LIFE SAVER"

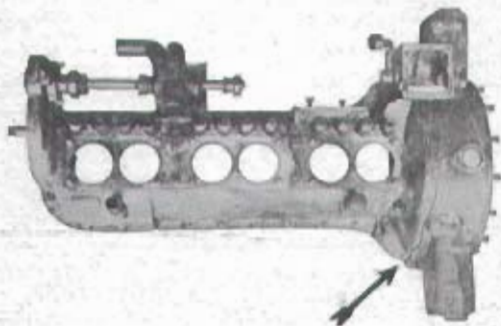
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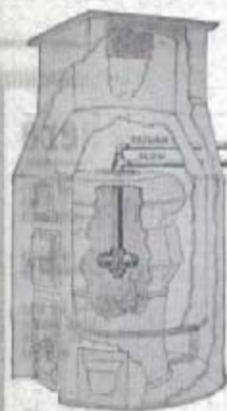
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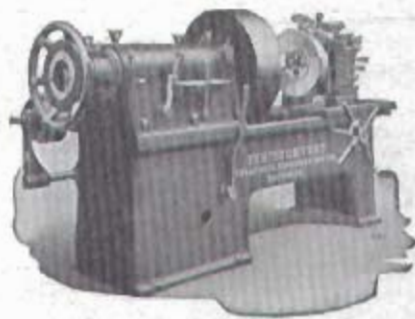
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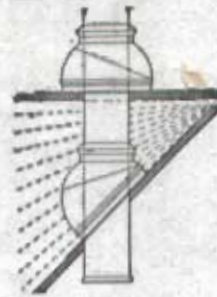
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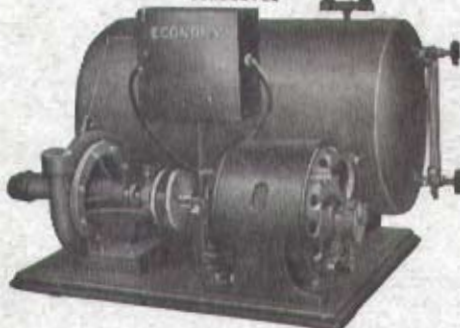


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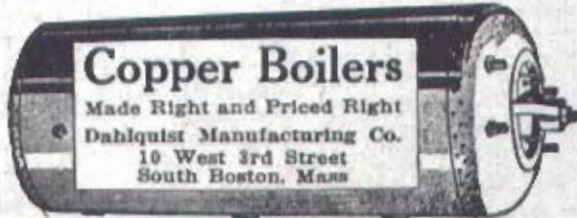
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Copper Boilers

Made Right and Priced Right
Dahlquist Manufacturing Co.
10 West 3rd Street
South Boston, Mass



COPPER BOILERS

We make a specialty of Cast and Riveted Pressure Boilers—large and small.
They are securely riveted and thoroughly tested. Your jobs will supply you.

Gerstein Brothers & Cooper, 1 and 3 West Third Street
South Boston, Massachusetts



Couplings for Iron and Copper Boilers



These couplings—in fact all our superior line of fittings—are just enough better than others to make it worth your while to specify “Trenton” when ordering from your jobber.

All highly finished, accurately threaded; they do not leak or quickly “play out.”



THE TRENTON BRASS AND MACHINE CO.
TRENTON, N. J.

PIERCE DOWN DRAFT HEATING BOILERS

SAVE TIME
FUEL

Manufactured only by

Pierce, Butler & Pierce Mfg. Corp.
New York

Brooklyn, Philadelphia, Boston, Baltimore, Worcester
Newark, Syracuse, Washington, Detroit.
For Sale by ALL STEAM FITTERS

We are
Headquarters
for
SMALL SANITARY WARE

**BASINS
URINALS
SHORT HOPPERS
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**Large stock on hand
Prompt shipments**

JOHN MADDOCK & SONS
Trenton, New Jersey

ILLINOIS

Magazine Feed

Hot Water Heater

For Hard Coal



These heaters are giving splendid satisfaction. Now built in three popular sizes: No. 5, 6 and 7; capacities: 100, 180 and 300 gallons per hour.

They KEEP FIRE OVERNIGHT—a good feature. We also manufacture the IMICO Garbage Burner, House Heating Boilers, Heating Specialties and Malleable and Cast-Iron Fittings. Send for catalogues and prices.

Illinois Malleable Iron Co.
1801-25 Diversey P'kway, Chicago, Ill.

They Make Hard Water as Soft as Rain Water

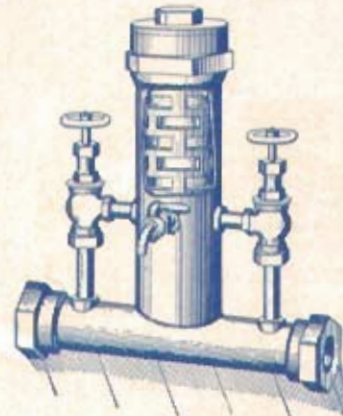


Fig. 118
No. 5 2-4 - inch Compound Injector
Patented in U. S., Canada and Foreign Countries

YOUR CUSTOMERS WILL APPRECIATE THEM. TO INSTALL THESE DEVICES MEANS BETTER RESULTS AND MORE SATISFIED CUSTOMERS.

Compound Injector & Specialty Co.

ORIGINATORS, DESIGNERS AND SOLE MANUFACTURERS

1897



1921

Trade Mark Registered

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CHICAGO, U. S. A.

Hot Water—

anywhere, any time,
any amount, *instantly*

is what you can guarantee
absolutely by

The Patterson System of Water Heating

Patterson-Kelley Co.

Water Heating Engineers & Manufacturers of Heaters
23 Church St., New York



EAGLE Brand Plumbers' Lead Goods

LEAD traps, bends, ferrules, pipe, roof flange, pot lead, solder, everything the plumber uses of lead is described and listed in our new catalog — Plumbers' Lead Guide.

It will make a valuable addition to your working library. The lead pipe calibre list, sheet lead table of weights and thickness, stock package lists, and also list prices are compiled up-to-date and in a form for most convenient reference.

We will gladly send a copy on request.

The EAGLE-PICHER LEAD Company

208 S. La Salle St.
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1030 Broadway
CINCINNATI

SPARTAN

STRENGTH and SIMPLICITY

are the two leading characteristics of the Spartan Chain Pipe Wrench. It is of correct mechanical design and construction. Lasts long and wears well.

The slant of the teeth makes the Spartan bite immediately, even when the teeth are dull. This slant also tends to force the jaws against the handle instead of spreading jaws, as in other designs.

Bolt heads will not pull off or threads strip. Send for our circular describing Spartan simplicity and strength.

The
Drop Forging Co.
OF NEW YORK

JERSEY CITY, N. J.



Wolverine Showers Sell

Install a Wolverine \$2460 Perfection Portable Shower in your Show Room. It's a proven sales winner of striking appeal and elegance. Can be instantly connected with Bath Cock. Furnished with 5" Shower Head, heavy White Duck Curtain and Curtain Ring. Cling-tight Connection prevents slipping off Bath Cock.

Wolverine Showers are made in many styles for connection to Bath Cock or water service. Write for prices or order a sample to be returned at our expense for credit if price and Shower are not satisfactory.

WOLVERINE BRASS WORKS
Manufacturers

GRAND RAPIDS, MICHIGAN

Wolverine Company, Inc.
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The "S & K" Rainbow Shampoo Fixture



A high-grade fixture in every respect. Low price permits its use on any job.

Furnished complete with hose and sprinkler.

In ordering specify distance from center of cock holes.

Write for prices and details of the complete "S & K LINE."

Street & Kent Mfg. Co.

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For Sale by All Jobbers

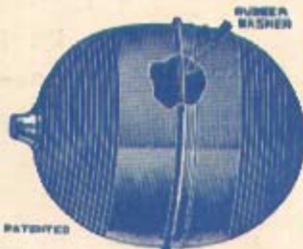
HYDRAULIC FLUSH VALVE

INSTALLED IN OUR

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TANK, BOWL and VALVE Manufactured by
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NO-SOL Solderless Copper Float

The Peer of all Floats

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