PITTSBURGH SECTION OF THE
AMERICAN CHEMICAL SOCIETY

FIFTH ANNUAL SMOKER

Thursday, Feb. 22, 1923, 8:15 p.m.
BUREAU OF MINES AUDITORIUM
4800 Forbes Street
Flour Testing Apparatus

Cut shows the Jago tester for determining the stickiness or viscosity of dough. This instrument is described in detail in Jago's book on flour testing. Price of the Jago tester as shown in cut........... $125.00

Besides the above we stock a large variety of apparatus for flour testing including the following:

- Baking Cylinder with graduated indicator and detachable cup $8.00
- Gasometer 1000 cc.................. $9.00
- Flour sticks, of spring metal steel
  - 6 x 2½"............................ .90 each
  - 8 x 3¼"............................ $2.25 each
- Flour Stick, of Brass................. $4.00
- Freas Vacuum Oven, small size...$265.00
- Freas Baking Oven, small size...$570.00
- MacMichael Viscosimeter............$210.00

Full details of above and other forms of apparatus on request.

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FIFTH ANNUAL SMOKER OF THE
PITTSBURGH SECTION

Hey, all you beaker balancers and element jugglers! This is to notify you that on the evening of February 22 we are going to stage one of the greatest smokers ever pulled off in this city of industrial achievement. You are hereby warned to make the necessary arrangements to attend this gala affair, or you will spend the rest of the year bemoaning the fact.

Words cannot describe the amount of exuberance and pep (to say nothing of gastronomic temptations) that will be crowded into this all-too-short evening. The entertainment committee has made arrangements with no less a luminary than Flo Ziegfeld of "Follies" fame to borrow some of his most talented and handsome editions of Adam's rib to cast a spell over the august assemblage of retort swingers. In other words, this bevy of buxom beauties will endeavor to sing and dance for you until you cry enough—if you are still able to say the word.

There will not be any home talent at the smoker except in front of the footlights; and, if those down front don't get some new ideas on how to shake a wicked phosphorus, we will miss our guess. If you are a woman-hater do not come; for, as Mr. Florian Slappey would say, "Women is something that we ain't got nothin' else but." Of course, this is a slight exaggeration as there will be an orchestra and a movie to fill out and plenty of eats to fill in. If this does not sound like the greatest show on earth, let me quote the remarks of some of the Committee when viewing the photos of our array of femininity.

"Beautiful babies" (Married—name withheld).

"Lead me to them" (Too old to make such a remark).

"Colorful collection of coryphees" (Too poetical—name withheld).

"Mother guide your son" (Youthful member—name withheld).

Now what more could you ask for an evening's pleasure away from dull care and all that goes with it?

In spite of the heavy expense and numerous details in arranging such a stupendous and colossal affair as this is going to be, the price will remain the same as before the war, and you know what that means. It is a good old American dollar, sometimes called a buck, an iron man or a case note—but a hundred cents by any other name is still a dollar. We know you expected to pay more but we wanted to give you that grand and glorious feeling of realizing that a dollar will go so far. It will not, ordinarily, but our research chemists have made it possible to stretch it beyond the elastic limit.

All that we ask is that you come and bring your friends whether members of the Society or not, and help make this a smoker that will not be forgotten. It will start promptly at 8:15 and will finish when you have eaten enough to make an elephant blush.

Come and smoke up; learn all the latest songs and dances; eat, thirst and be merry, for to-morrow you must go to work again.

Entertainment Committee.
PAPERS AT THE JANUARY MEETING

As indicated in the minutes printed on page 30, three speakers addressed the meeting of January 18, the audience including many members of the American Ceramic Society. In the absence of Mr. E. H. Frits, scheduled to speak on "Manufacture of Electrical Porcelain," the subject was ably treated by Mr. M. H. Hunt, also of the Westinghouse High Voltage Insulator Company, of which organization he is research ceramic engineer. Both Mr. Hunt and Mr. Poste made free use of lantern slides, and the latter also exhibited specimens of enameling materials. Mr. Brenner showed various articles made of oven glass. It is to be hoped that many members of the Section saw the remarkably extensive and interesting display by the company represented by Mr. Brenner (The H. C. Fry Glass Company), at the Fort Pitt Hotel the week of our January meeting. Mr. Brenner's paper is printed in full in "Glass Industry," Feb. 1923, p. 23-24, and in "National Glass Budget." Jan. 27, 1923, p. 1, 11.

For the benefit of those who did not attend the meeting an attempt is made to give, below, some idea of the scope and content of the three papers presented.

EMERSON P. POSTE ON "MANUFACTURE AND USE OF ENAMEL-LINED APPARATUS"

By means of lantern slides the general processes of manufacture were presented. The following outline indicates the main points of interest to workers in various fields.

Of particular interest to ceramic men: Raw materials; nature and analytical control, Enamel composition, Smelting; control of operation, chemical changes taking place, fusion temperature of product, Grinding; control of moisture and fineness, Application; use of clay and electrolytes as vehicles, Burning; nature of reactions, Properties of enamel; physical, chemical, Research problems; tests, surface reactions, synthetic studies, application of petrography.

Of particular interest to the chemist: Reasons for enameled equipment; sanitation, metallic reaction or contamination, destruction of unprotected metal, Types of enamel, Uses of enameled apparatus; Dairy, canning, edible oil, pharmaceutical, and chemical industries.

Of interest to the metallurgist: Quality of steel, Welding, Heat-treatment, incidental to enameling, Foundry control, Heating of cast-iron during enameling.

RALPH F. BRENNER ON "MANUFACTURE AND PROPERTIES OF OVEN GLASS"

Glassware for baking purposes or oven glass is a comparatively recent invention. The essential properties are:

1. High thermal endurance; that is, the power to withstand temperature changes.
2. High stability; that is, the power to resist chemical attack.
3. Resistance to mechanical shock.
4. Good workability; that is, practicability from a manufacturing viewpoint.

The control of these properties is very necessary in the manufacture of oven glass.

The manufacture of oven glass is similar to the manufacture of ordinary glassware, except that in most cases the temperatures required are higher. The batch, consisting of the necessary raw materials, is very thoroughly mixed, either by turning over several times by hand or in a mechanical batch mixer, which is the more efficient method. Cullet, which is waste crushed glass of the same composition, is then placed with the batch, and it is filled in a day tank or in a continuous tank or in pots in a pot furnace. The temperature required in melting is between 2500 and 3000 degrees F., depending on the composition of the batch. Temperature control is very necessary in order to obtain good workable glass.

The glass is worked into the desired shapes by pressing or blowing into molds, or in some cases by skilled workmen by the use of hand tools.

The high thermal endurance permits considerable latitude in the annealing process. The molded ware may be stacked on the factory floor, and subsequently charged, cold, in the hot lehr at any time.
M. H. HUNT ON "MANUFACTURE OF ELECTRICAL PORCELAIN"

Electrical porcelain in common use on transmission lines and in connection with electrical apparatus consists of approximately 30 per cent. ball clay, 20 per cent. china clay, 30 per cent. feldspar, and 20 per cent. flint, intimately mixed and fired at a temperature between 1330 and 1370 degrees C. The essential processes in its manufacture are as follows.

1. Mixing of the raw materials.
   This is accomplished by first grinding the feldspar and flint and then adding the ground material to the clay, which has been thoroughly disintegrated in water. The porcelain body in suspension in water is screened and passed over magnets.

2. Preparation of the plastic body.
   The above mentioned suspension is filterpressed — a process which eliminates all but about 23 per cent. water and leaves a plastic mass. This mass is run through a pug mill which works the body into a solid homogeneous mass and extrudes it through orifices of various sizes.

3. Formation of the insulators.
   The clay from the pug mill is cut into suitable lengths and made into shapes by either jiggering or hot pressing.

4. Drying and glazing of the formed insulators.
   The insulators are dried in continuous ovens, and the dried units after inspection are dipped into glaze. Parts not to be glazed are protected by paraffine.

5. Firing.
   The glazed insulators are placed in the kilns in saggars, and fired to 1350 degrees C. in 60 to 70 hours.

   All insulator parts are electrically tested at their flash-over voltage for five minutes. The tested parts are then assembled with neat cement and aged for a number of days, after which time they are given another flash-over test.

   The quality of electrical porcelain depends relatively little upon the composition used, although it must be such as to produce a thoroughly vitreous structure under any condition of variation in kiln temperature. The most important elements are the control of all the essential processes throughout the entire factory, and the careful design of the insulators from both an electrical and ceramic standpoint.

DEVELOPMENT AT CARNEGIE INSTITUTE OF TECHNOLOGY

The solution of still another industrial problem has been undertaken at the research laboratories of Carnegie Institute of Technology, in experiments to determine the relative efficiency of kerosenes and oxidized kerosenes as fuels.

In accordance with the policy of the Institute to link up its educational facilities with modern industry, the Department of Chemical Engineering has been conducting a series of tests to determine the relative merits of various oils as usable fuels. The completion of this important work should go a long way toward solving the problem of oil conservation, by the possible development of a new fuel.

According to a report by Dr. J. H. James, Head of the Department conducting the experiments, oxidized kerosenes cause less "knocking" tendencies than straight kerosene when used in a kerosene engine. The tests also showed that oxidized kerosenes have approximately the same power development as ordinary kerosene, in spite of the fact that their thermal value is one-eighth less. Dr. James attributes the efficiency of the oxidized kerosenes to the better "clean up" in the combustion of these partially oxidized fuels.

The success of the experimental work at Carnegie at this stage gives promise that oxidized kerosene, which is manufactured by catalytic oxidation from low grade petroleum, may become a useful fuel in the future. Its properties may cause it to be used industrially in kerosene engines or blended with gasoline for use in gasoline engines. Although it has a somewhat lower fuel value than ordinary kerosene, one of the most favorable features of its effectiveness is that it undergoes much better combustion in the internal combustion engine.

"COKE MINERS," ATTENTION!

The "Coal Age" of January 4 prints on page 16 a book review in which it is stated that "This book is intended for chemists at gas works and coke mines."

THOUGHTS

Little Willie drank the glassful,
But now he drinks no more;
For what he thought was H₂O,
Was H₂SO₄.

Here lies the body of Jake,
A warning to all who pass,
He thought his foot was on the brake—
But it was on the gas.
Our Pittsburgh Office is at Your Service

2204 Oliver Bldg.

Taylor Instrument Companies

ROCHESTER, N. Y.
AMERICAN CHEMICAL SOCIETY
Founded 1876
President Edward C. Franklin
Stanford University, Palo Alto, Cal.
Secretary Charles L. Parsons
1709 G. St., N.W., Washington, D. C.

PITTSBURGH SECTION
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J. O. Hand H. C. P. Weber
R. E. Zimmerman

How come we don’t have more men at the dinners? Of course, forty isn’t so bad, and it makes a nice little dinner party; but, when you figure it on a membership basis of nearly 600, it isn’t just so good, either. Somehow, it reminds us of the “Charge of the Light Brigade” at Balaklava, written up by a fellow named Tennyson. As we recall it, they did their dam’dest but returned without a quorum.

In explaining the disaster resulting in the loss of most of the “Six Hundred,” Tennyson places the blame on the fact that “some one had blundered.” That can’t be true in the case of the Section dinners. The arrangements are properly made, due notice is given, and, from a gustatory standpoint, the dinners are excellent. For the price of one smacker they are exceedingly good value—so good that we should think a lot of the married men would want one wrapped up to take home.

The dinners must be perfectly satisfactory, for we notice that the same men keep coming back month after month; so, if there be any “blunder,” it must be one of omission in failing to create adequate publicity—and the burden for this neglect rests on all our members equally.

Chairman Weidlein, in outlining the procedures of the Indianapolis Section, has presented the germ of a good idea—to invite other chemists and near-chemists as our guests at the dinners. The next Section activity is the Annual Smoker and if precedent means anything the attendance will be large. This occasion will therefore afford a fertile field for prospecting for new dinner eaters. Look ’em over and (mentally or otherwise) note the names of a few men whom you may be able to interest in the March dinner. Probably you will see some one whom you would like to invite as your guest at his Section dinner, and undoubtedly many men who attend the meetings could and would come in time for the dinners, on their own budgets, if properly encouraged. The dinners are worth while and their benefits should be shared by more than the “faithful forty.”

George Washington is credited with having thrown a silver dollar across the Potomac, and also with having hurled a British sovereign across the Atlantic. Both exploits may be explained on the theory that a piece of money would go a dam-site farther in those days.
BURRELL

THE

OBERFELL

IMPROVED GAS TESTING APPARATUS

for determining the
Gasoline Content—Volume—Specific Gravity
of Natural Gas

Light
Convenient

Accurate
Rapid

This apparatus has been designed for field work at the wells and for checking the efficiency of absorption and compression gasoline plants. It represents a great advancement over methods heretofore used and includes all features developed during three years of actual use in the field.

The apparatus includes all the necessary equipment for determining the gasoline content by absorption in charcoal, and the volume and specific gravity of the gas, all contained in a strong hardwood carrying case provided with compartments for the various instruments.

Descriptive Bulletin Sent Upon Request

Burrell Technical Supply Co.
Pittsburgh, Pa.

Laboratory Apparatus and Chemicals
SECRETARY E. S. STATELER

Ernest S. Stateler made his debut in the local Section when he became its Secretary last year. Successfully holding down this title during convention year is no small job, but Stateler did more than hold it down, he set a mark for other secretaries to shoot at. If you could gain the innermost shrine of Dr. Parsons' office in Washington he would tell you that Stateler did almost as much toward making the convention a success as he did and any one in the Mellon Institute will tell you Stateler did a great deal more. Keeping the records and membership list of the local Section up to date and keeping Dr. Parsons informed of our doings are among his smaller duties; but they don't swamp him with detail as they might a smaller man.

He does not confine his activities to the Chemical Society, however. Among other things he is a Junior Fellow in the Bread Fellowship at the Mellon Institute. With his Bachelor's degree from the University of Kansas, he has been with the Mellon Institute since 1920. Last year, he discovered a hitherto unsuspected relationship between beer and baking besides the obvious one through the yeast intermediate. It is expressed somewhat as follows: "The more beer following a local Section meeting, the better baker for the next month." Another discovery was that the chemist can win one of the prized awards of the profession by doing library work in addition to laboratory work. Other activities include giving talks before the Y. W. C. A. and other lay bodies about his favorite hobby of bread-making.

That's another mark some of us could shoot at.

He co-operates perfectly with the other officers of the Section. All he asks is that the members co-operate with him, even to the extent of always returning the dozens of post cards that come out with the CRUCIBLE. Give him your help, particularly if he gets out a local directory this year.

THE MEMBERSHIP CAMPAIGN

On February 1 we had 68 new members to show for our work, and the "Live Wire Club" had 53 members who qualified by getting one or more new members.

The name of W. U. C. Baton should have been included in the list of "Live Wires" sent to the CRUCIBLE for inclusion in the January issue. This oversight is regretted as Mr. Baton secured two new members.

One of the most interesting and valuable pieces of information in any organization, is to know who's who.

Here's the list of "Live Wires" in the Pittsburgh Section:

T. R. Alexander, Jr. E. H. McClelland
C. E. Andrews J. R. McTaggart
H. C. Bashium H. H. Meyers
W. U. C. Baton L. H. Miller
C. E. Betz Ray Murphy
Earl Blough C. E. Nesbitt
R. H. Brownlee G. Norman Reis
H. E. Campbell C. J. Rodman
E. J. Casselman D. A. Russell
H. V. Churchill Joseph Schimmel
H. H. Craver John E. Schott
Edw. Dillinger J. E. Shero
Carl J. Engelder A. E. Shupp
W. G. Faragher O. J. Sieplein
A. C. Fieldner Alex. Silverman
C. G. Fisher H. E. Slocum
Joseph E. Gross Chas. G. Snyder
J. O. Handy Gebhard Stegeman
F. E. Hartman F. W. Stockton
C. S. Hoyt W. J. Sutton
D. L. Jacobson E. W. Tillotson
J. H. James R. H. Uhlinger
G. W. Jones Chas. Watkins
C. G. King H. C. P. Weber
Alex. Long E. R. Weidlein
A. Lowy R. E. Zimmerman
O. O. Malleis

HANDY APPOINTED CHAIRMAN OF PERMANENT-FUND COMMITTEE

As announced in the CRUCIBLE last month a Permanent-Fund Committee was appointed by Chairman Weidlein, who had been made chairman of this Committee under the previous administration. Mr. Weidlein has recently appointed Mr. J. O. Handy, a member of the Committee, to act as chairman.
MINUTES OF JANUARY MEETING

184th Meeting, January 18, 1923

Met in a joint meeting with the American Ceramic Society in the Auditorium of the Bureau of Mines at 8:20 p.m. with Mr. J. O. Handy in the Chair.

Mr. Handy introduced to the Section the newly elected Chairman, Mr. E. R. Weidlein and duly installed him in office. After a short speech of acceptance, Mr. Weidlein extended the courtesy of the Chair to Vice-Chairman Alexander Silverman, who is also Chairman of the Pittsburgh Section of the American Ceramic Society.

Mr. Silverman thanked the Pittsburgh Section for its hospitality and cordiality to the local Section of the American Ceramic Society and extended an invitation to the American Chemical Society Section to attend the annual convention of the American Ceramic Society to be held in Pittsburgh the week of February 12.

Mr. Silverman introduced the following speakers, who gave papers on their respective fields of work:

Mr. M. H. Hunt, Ceramic Engineer, Westinghouse High Voltage Insulator Co., Derry, Pa., on “The Manufacture of Electrical Porcelain.”

Mr. Emerson P. Poste, Director of Laboratories, Elyria Enameled Products Co., Elyria, Ohio, on “Manufacture and Use of Enamel-Lined Apparatus.”

Mr. Ralph F. Brenner, Research Chemist, H. C. Fry Glass Co., Rochester, Pa., on “Manufacture and Properties of Oven Glass Cooking Ware.”

The meeting adjourned at 10:00 p.m.

E. S. Stateler, Secretary.

PITTSBURGH FIRST

Those who are not regular readers of “Pittsburgh First” (The organ of the Chamber of Commerce of Pittsburgh) should make an effort to get the issue of February 3, and read therein an article by Arthur W. Thompson, President of the Philadelphia Company. Mr. Thompson deals with “Community needs of Pittsburgh,” discussing the problem of diversified industries and appealing to loyal Pittsburghers to acquaint themselves with the resources of their own city.

In the same issue of “Pittsburgh First” is a “distorted” map of the United States representing the various states with areas proportional to their respective populations, and in the issue of January 20 is a local map showing that with a metropolitan radius equal to that of Detroit, Pittsburgh would have a population of 1,300,000.

The postponement of the Smoker to coincide with Washington’s Birthday suggests an act of professional courtesy, so, realizing the versatility of “The Father of His Country,” we endeavored to find out whether he had any status as a chemist. The only evidence is in a receipt for making “Small Beer,” given in an unpublished note-book dated 1757. The formula, which sounds as if the product might have considerable potency, contemplates units of 30 gallons, thus suggesting a fair-sized venture in applied chemistry at that early date.

THE JANUARY DINNER

The dinner on January 18 was both pleasant and profitable. The attendance was over forty, including a number of members of the American Ceramic Society (the “little A.C.S.”), as Mr. Greaves-Walker phrased it in prefacing a very pleasing little talk.

Chairman Weidlein, introduced by retiring Chairman Handy, told of the activities of the Indianapolis Section as observed when he addressed that Section recently.

Indianapolis has some features which might well be emulated by Pittsburgh or any other Section. For example, the attendance at the dinners is approximately 100 per cent. of the membership. Many men interested in chemistry and allied subjects are brought to the dinners as guests—a sound policy in paving the way for membership extension.

The dinner wound up in the customary persiflage (Boy, a lexicon for Mr. Rodman) the prize (if any) going to Earl Blough for his formulation of a general mathematical expression to represent the quantity of liquor which may be imbibed by a Scotchman. As Blough puts it, “A Scotchman can drink any ‘given’ quantity of whiskey.”

Two of the best of the other stories are reproduced below:

“Once upon a time an Englishman
How Much of Your Life Is Spent Filtering?

The general satisfaction all Whatman grades are now giving is proven by the fact that the majority of American Chemists have standardized on them.

If you are not one of these satisfied users, why not write and tell us the reason? Doubtless we can assist you in a way that may not have occurred to you.

Write for Booklet giving
Typical Applications

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PROGRAM

FIFTH ANNUAL SMOKER
PITTSBURGH SECTION OF THE AMERICAN CHEMICAL SOCIETY

THURSDAY, FEB. 22, 1923

8:15 P. M.

1. Overture .................................................. Orchestra
2. Movies .......................................................... See for Yourself
3. Chemists' Follies of 1923 ........ In Latest Songs, Dances and Patter Full Orchestral Accompaniment
4. Gastronomical Accomplishments .................. By Entire Company Top Floor

Smoking—Continuously

ENTERTAINMENT COMMITTEE

G. Norman Reis, Chairman
H. V. Churchill  C. G. Fisher  W. F. Henderson
H. E. Slocum  W. P. Yant
LOCAL INDUSTRIAL ITEMS

By E. J. Casselman

The Carnegie Steel Co. has blown in several additional furnaces and has 45 or 46 stacks in blast.

The Standard Seamless Tube Co., 313 Sixth Avenue, Pittsburgh, manufacturer of steel tubing, is considering the erection of an addition to its Ambridge plant to cost about $75,000. H. E. Wharton is company engineer.

The Pittsburgh Plate Glass Co., 290 Elizabeth Avenue, has work in progress on the first unit of its new lineseed oil mill at Riverside and Chester Avenues, Newark, adjoining its paint works at this location. The plant, with grain elevators and machinery, will cost approximately $300,000, and will give employment to about 100 men. It is expected to be ready for service early in March. Headquarters of the company are in the Frick Building, Pittsburgh, Pa.

The American Window Glass Co., Pittsburgh, is advancing production at its plants, with employment of additional workers. During four weeks near the close of last year, 567 carloads of window glass were shipped, establishing a new high record.

The Standard Tin Plate Co., Canonsburg, Pa., has resumed operations at eight hot mills, suspended on account of necessary repair work a few months ago, making a complete battery of 24 mills in service on full turn. The plant is giving employment to about 2500 men.

The Liberty Mirror Works, Inc., has been incorporated with a capital of $150,000, to manufacture mirrors, glass products, etc. William H. Colbert, 6615 Kelly Street, Pittsburgh, is treasurer and representative.

SAFETY LECTURES

In a series of eleven meetings under the auspices of the Western Pennsylvania Division of the National Safety Council, the following programs are still to be carried out. Meetings are held in the Chamber of Commerce rooms:

March 5—Relation of Industrial Accidents to the Home.
March 12—Playlet, "A Scene in a Toolroom."
March 19—Safety in and About the Home.

CARNEGIE LIBRARY OF PITTSBURGH

The Carnegie Library of Pittsburgh has just published two small pamphlets which are now available free in the Technology Department. A "Review of Iron and Steel Literature for 1922," 20 pages, is reprinted from the "Blast Furnace and Steel Plant" and "Forging and Heat Treating," January, 1923. The "Literature of the Coal Industry for 1922," 16 pages, is reprinted from the "Coal Industry" January, 1923. The Andresen Company, publishers of the trade journals mentioned above, has very generously loaned the type from which these lists were originally printed, and copies have been reprinted in the Printing Department of the Library.

These lists include the books, important trade publications, and serials issued during the past year on the subjects of coal and ferrous metallurgy. The publications listed are, of course, not uniform in value, but some attempt has been made to indicate the scope and character by means of notes.

Many members of the Section are familiar with the "Journal of the Institute of Metals," and recognize the abstracts therein as the best single source of printed information regarding the non-ferrous metals, since the beginning of this publication in 1900. Those who use this important reference work will welcome the appearance of a new general index, 1900-21, which obviates the necessity of examining the individual semi-annual volumes. This index is now on the Technology Department shelves.

The Technology Department report to the Library Director, submitted February 1, shows that the number of technical reference books added in 1922 was 2897; a gain of 90.2 per cent. over 1921. The chief factor in this very generous increase was the purchasing power of the "Chemists' Fund." During 1922 the Technology Department gave assistance with 7633 questions, and received only 45 on which no help at all could be given; it also answered 756 letters from 35 states and 10 foreign countries. The "Technical Book Review Index" published by the Department, during the year recorded reviews of 4204 new scientific and technical books.

Dr. Silverman’s paper on “Pittsburgh as a Ceramic Center,” was reprinted from the January CRUCIBLE in “Glass Industry” for February. It appeared also in “Glass Worker,” January 20, and “National Glass Budget,” January 20. Dr. Silverman’s “radio” talk on glass, February 7, appears in “Glass Worker” of February 10.
REPORT OF THE EMPLOYMENT COMMITTEE FOR JANUARY 1923

Positions filled since last report, 3. Applications received since last report and not definitely known to have been filled:

For chemists:
No. 15. Steel-works wants a man to take charge of a laboratory. Must have had experience in running a laboratory and in the analysis of all kinds of alloy and special steels.

For positions:
No. 25. Chemist, some experience, wants position as routine analyst.

No. 28. Man of experience in the purchasing department and laboratories of iron and steel plants, as well as three years in glass manufacture, wants position with iron or steel company. Best of references. Salary, $3000.

No. 29. Man of seven years' experience in analysis of iron, alloy steels, aluminum, and aluminum alloys, wishes to change. Last year and a half in charge of a laboratory. Experience in metallography. Salary by arrangement.

Failure of employing concerns, as well as applicants for positions, to notify the Chairman when positions are filled, continues, as in the past, to be a serious handicap to efficiency in carrying on the work of the Committee.

H. C. Griffin, Chairman.

Teacher: What distinguished foreigner helped the Colonies in the Revolution?
Willie: God.

Bill: Next to a woman, what is the most nervous thing you know?
John (ungrammatically): Me—next to a woman.

There are enough serious things in life without considering yourself one of them.

The ingredients of the average man are as follows:
Fat enough for seven bars of soap.
Iron enough for a six-penny nail.
Sugar enough to fill a shaker.
Lime enough to whiten a chicken coop.
Phosphorus enough to make several hundred match tips.
Magnesium enough for a dose of magnesia.
Potassium enough to explode a toy cannon.
Sulphur enough to rid a dog of fleas.
This whole collection of junk, at the present inflated prices, is worth approximately 98 cents.

The preacher had been strolling about the links, and wishing to drive home a small moral lesson said mildly, "I notice that the players who get the lowest scores are not those who swear." "Why the hell should they?" demanded the gloomy golfer as he dug up some more turf.

The Membership Committee reports 68 new members. We wonder how many of these are "pure" chemists.
A. H. T. CO. DOUBLE CHECKED

ANALYTICAL BALANCE WEIGHTS

THE TEST

IN OUR STOCK FOR IMMEDIATE SHIPMENT

OF SERVICE

ANALYTICAL WEIGHTS, A. H. T. Co. Double Checked. As suitable for all ordinary analytical weighings, we offer this series of weights made under our direction and in accordance with our specifications.

The weights are all checked upon completion, and again after lapse of a considerable time in order to detect the small changes in value which sometimes occur. No weights are put into our stock with errors greater than those given in the tolerance table, but chemists are reminded that slight changes in value occur both while the weights are in stock and after they are put into laboratory use.

The tolerances to within which these weights are adjusted are as follows:

<table>
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<tr>
<th>Denomination</th>
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<th>Denomination</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 grams</td>
<td>± 6.5 mg.</td>
<td>50 mg.</td>
<td>± 0.3 &quot;</td>
<td>20 mg.</td>
<td>± 0.2 &quot;</td>
<td>10 &quot;</td>
<td>± 0.2 &quot;</td>
</tr>
<tr>
<td>50 &quot;</td>
<td>± 3.3 &quot;</td>
<td>10 &quot;</td>
<td>± 0.1 &quot;</td>
<td>5 &quot;</td>
<td>± 0.03 &quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 &quot;</td>
<td>± 0.2 &quot;</td>
<td>500 mg.</td>
<td>± 0.10 &quot;</td>
<td>20 &quot;</td>
<td>± 0.04 &quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 &quot;</td>
<td>± 0.2 &quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The weights are supplied in a velvet-lined, polished mahogany box, with fractionals and riders under plate glass cover, and with ivory-tipped forceps. The fractional parts from 1 to 20 mg are of aluminum, and from 50 to 500 mg are of palladium and gold alloy or platinum, as may be the more readily obtainable. The fractional pieces have one edge turned in a vertical position for convenience in handling with forceps. One each 5 and 10 mg riders are furnished with each set.


Sets from 1 mg to grams...... 20 50 100 200

Per set ................................ 21.75 23.50 26.75 33.75

1974. ditto, but with gram pieces carefully lacquered instead of gold plated.

Sets from 1 mg to grams...... 20 50 100 200

Per set ................................ 19.25 20.50 22.75 29.25

10% discount in quantities of 10 sets of one size or assorted.
15% discount in quantities of 25 sets of one size or assorted.
20% discount in quantities of 50 sets of one size or assorted.
25% discount in quantities of 100 sets of one size or assorted.

Prices subject to change without notice

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Spring, 2017

Dr. David Gallaher, Department Chairperson (project lead)
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