THE REFRACTORIES INSTITUTE

A NATIONAL ASSOCIATION TO PROMOTE THE INTERESTS OF MANUFACTURERS AND CONSUMERS OF REFRACTORY PRODUCTS

FIRST NATIONAL BANK BUILDING, PITTSBURGH 22, PA.

AVERY C. NEWTON, EXECUTIVE SECRETARY | SEPTEMBER 29, 1958 | SPECIAL BULLETIN

MINUTES OF THE MEMBERSHIP MEETING OF THE REFRACTORIES INSTITUTE

Held Sept. 11 and 12, 1958 at The Broadmoor, Colorado Springs, Colo.

Total attendance including guests was 63 men. Forty-three wives of members were also present to attend the social functions. Attedance list is appended.

President J. E. Brinckerhoff presided and Avery C. Newton acted as secretary of the meeting.

Minutes of the last membership meeting held at The Homestead, Hot Springs, Va., on May 8 and 9, 1958, previously submitted by mail, were approved.

F. H. Laube, Treasurer, presented the financial report for the five months' period April 1 to Aug. 31, 1958, copy appended. This report was received and ordered placed on file.

W. H. Peterson, Jr., Chairman of the Men's Golf Committee, reported on the rules of play for the golf tournament.

The President announced that the Board of Directors at their prior meeting on Sept. 11 had accepted with regret the resignation of John L. MacFarlane as Director of The Refractories Institute. William T. Tredennick was nominated and unanimously elected a Director to fill the vacancy and to serve until the next annual Spring election.

W. A. Turner, Chairman of the Mellon Institute Committee, thereupon presented the report of his committee, copy appended.

It being nearly noon, the meeting adjourned until 10:00 A.M. the following day.

Upon resuming the sessions, the President reported on the current activities of The Institute and the several actions taken by the Board of Directors at their meeting on Sept. 11 as follows:

1. You may have found on the table at the entrance to the ballroom, a supply of Membership Rosters. These have just been published by The Institute and will be distributed to the entire membership by mail next week. They are for the personal use of our members only and are not to be given to outsiders.

2. Also on the table is a supply of posters announcing the rules for the 1959 Award Contest for the best papers on any phase of refractories. A supply of these posters will be mailed next week to associate as well as active members. You are urged to see that these posters are put up on the bulletin boards in your offices, plants and mines. Your employees have talents and abilities—urge them to enter the contest. We want a lot of entries. The three prize winners will present their papers at the 1959 Factory Operators Meeting and will receive engraved gold watches.

3. After discussion at the Board Meeting yesterday, it was decided that it would be impractical to attempt to combine our Factory Operators Meeting with a college program and hold the meeting on the campus of a university having a ceramic engineering department. Our Factory Operators Committee will therefore meet in Pittsburgh on Sept. 23 to pick a site for the Operators Meeting, plan a program and arrange for visits to refractories plants as they have done in the past. These meetings have proven to be highly successful in the past and of great value to our production personnel. Your continued support of this worthy Institute activity is appreciated.

4. Two thousand copies of the Refractories Bibliography covering the years 1948-1957, inclusive, will be printed and distributed before the end of October.

It will be a massive volume of over 2000 pages weighing about 6 pounds. Containing abstracts of all the literature and patents on refractories, it will have interest especially for ceramic engineers and research personnel of our member companies. This Bibliography, as you know, has been jointly financed by The Refractories Institute and the American Iron and Steel Institute at a total cost of $60,000.

The Refractories Institute is taking 750 copies for free distribution among its members, depending on their size and need. We are also sending copies to the Ceramic Engineering Departments of the 17 universities and will hold in reserve about 100 copies.

The Iron and Steel Institute is likewise taking about 750 copies for free distribution among their members and technical libraries and research agencies in North America and Western Europe.

The balance of about 500 copies will go to the American Ceramic Society for storage and subsequent sale at $7.50 per copy to cover their costs of handling and mailing.

5. The Board of Directors discussed a number of new Institute activities of possible interest to the membership. These activities will be explored and in some cases questionnaires will be sent to the membership to determine the degree of interest and participation. Some of these proposed activities are:

Special committees to serve the peculiar interests of sub groups of the industry such as the Special Refractories Association, the Hot Top producers and others.

A committee of standards to explore and recommend uniform standards of packaging castables, mortars and plastics, similar to our palletizing recommendations.

The collection of statistics from the industry by an outside accounting firm and reporting in totals of refractories shipments by industrial consumer classifications, such as iron and steel, glass, power plants, etc.

The collection and reporting annually of such information as:

a. Total capital invested in the industry

b. Expenditures for research and development

c. Expenditures for plant expansion and improvement

6. A committee of the Board had been selected at the previous meeting to explore the advisability of extending the territorial limits of the membership beyond the present boundaries of the United States, Canada and Mexico. The Institute had recently received applications and inquiries from refractories companies in the Dominican Republic, Argentina and as far away as Australia.

The committee recommended and the Board agreed that the present territorial limits of membership should not be extended. It was felt that the cost of maintaining distant memberships, making available the test facilities at our Fellowship and furnishing technical and production know-how, would far outweigh the financial benefits to The Institute.

7. The Board discussed the question of holding future meetings at other locations than heretofore. The Secretary was instructed to submit at the next Board meeting the names of a number of likely sites. At present, we alternate each Fall between The Broadmoor and the Grand Hotel at Point Clear, Ala. Each Spring we alternate between The Greenbrier and The Homestead. The Secretary will appreciate receiving suggestions from the members.

Passing on to other matters, the President thereupon called on General Counsel, W. J. Kenney, who presented a report, copy appended, on the current status of percentage depletion.

The President then called on R. C. Shepard, President of The Denver Fire Clay Co., who introduced the guest speaker, Dr. Irving P. Krick, meteorologist and President of the Water Resources Development Corp. of Denver, Colo.

Dr. Krick gave a most interesting and informal talk on "Recent Developments in Weather Forecasting and Control." The numerous questions asked by the members at the conclusion of Dr. Krick's talk indicated the degree of interest in his remarks.

There being no further business to come before the meeting, upon motion, adjourned.

AVERY C. NEWTON, *Secretary.*

REPORT OF GENERAL COUNSEL

This is in the nature of a report of status rather than a report of progress in the depletion field.

There has been no substantial progress in the clarification of the refractories depletion problems since the spring meeting of The Refractories Institute in May, 1958.

However, certain straws can be reported, but only as measuring the velocity of the wind.

Treasury Legislative Efforts.—On April 25, 1958, the Treasury proposed an amendment to Section 613(C) of the Internal Revenue Code of 1954. The effect of this proposal would have been to establish a cut-off point for the refractories industry at the crushed and ground stage. However, the proposal did not provide any method to determine the value of crushed and ground clay. The Treasury proposals made no effort to solve this primary problem which has been plaguing the refractories industry for seven years. The Refractories Institute had requested an opportunity to express its views at a hearing to be held by the House Ways and Means Committee in July of 1958. These hearings have never been held. The Technical

by Congress, and signed by the President, the only effect of which so far as depletion is concerned was to make slight changes in the rules governing elections to aggregate mineral properties.

Pending Depletion Regulations.—At the most recent meeting with Treasury representatives the industry was assured that a final revision of percentage depletion regulations originally proposed on November 3, 1956, would be published in June of 1958. This promise has not been fulfilled to date and there is no reason to suppose that they will be completed before the end of the year 1958. The refractories industry has made determined efforts to obtain a satisfactory revision of the proposed regulations to establish a method for valuing crushed and ground clays for percentage depletion purposes.

Internal Revenue Examination Policy.—The Internal Revenue Service has, in accordance with its announced policy, settled depletion cases involving products made solely from shale on the basis of end product depletion, following the *Cherokee* line of decisions. However, the Service has not yet announced its policy with respect to depletion upon products made entirely or in part from "refractory and fire clay". In the absence of such announced policy, Examining Agents have generally refused to grant end product depletion in such cases, except where the fire clay content has been minimal. The result has been an almost complete moratorium on settlement of depletion claims where refractory or fire clay is a material constituent of the product.

There seems to be little prospect for any overall betterment of the situation until the Service issues instructions to its examining and engineer agents, which probably can only come after final regulations are developed.

The March of the Cases.—Since the last meeting two end product depletion cases have reached trial, in both of which fire clay is involved as a major raw material constituent of the finished product. In both cases the government had countered the taxpayer's claim for end product depletion by asserting the existence of a market for raw lump fire clay and that this is the first marketable product upon the value of which depletion is to be computed.

In the *Cannelton Sewer Pipe* case in the U. S. District Court for the Southern District of Indiana the taxpayer claimed end product depletion on sewer pipe with a substantial fire clay content. The government contended that there was a market for raw fire clay, but the only raw clay sales produced in substantiation of this market were approximately 75 miles distant from the taxpayer's plant. The District Court held that these sales did not establish a market for raw fire clay in the area of Cannelton and allowed end product depletion to the taxpayer. This case will probably be appealed to the Seventh Circuit Court.

In the *Sparta Ceramic Company* case the taxpayer brought suit for end product depletion in the U. S. District Court for the Eastern District of Ohio. This case was reached for trial in Cleveland in August, 1958. The taxpayer is a manufacturer of small glazed and unglazed wall and floor tile and claimed depletion computed on net sales of finished tile. The government contended that the first marketable product was alternatively either (1) the value of raw clay; (2) the value of structural brick; or, (3) the value of unglazed tile. At the trial the government produced evidence showing substantial sales of raw fire clay produced from #6 and #5 Ohio seams in the years 1951-53. These raw clays were used largely for the manufacture of refractory products and sewer pipe and

area of Ohio in 1951 apparently approximated 30% of the total tonnage of clay processed. However, the taxpayer used fire clay from Seams #4 and #3-B in the manufacture of its tile and few sales of this type clay were shown. The matter is now pending before the Judge for decision. However, the taxpayer may well obtain end product depletion on the basis that no market has been shown to exist for the particular fire clay used by it.

The foregoing cases indicate the beginning of what may be a serious problem confronting not only the refractories industry but all clay industries. Apparently, the government proposes, where possible, to contend for a raw clay market in any litigation involving depletion of fire clays. The government engineers in the *Sparta* case performed enormous work in assembling these figures and subpoenaed many of the clay consuming and producing industries, including some members of the refractories industry, to testify as to raw fire clay purchases and sales.

Other cases are pending in other District Courts by structural and sewer pipe manufacturers in which the government counsel have raised such a defense.

Respectfully submitted,
WILLIAM J. KENNEY,
General Counsel

REPORT OF MELLON INSTITUTE COMMITTEE

As you will note from the Treasurer's Report for the five months, April 1-August 31, 1958, income from tests was $19,700, disbursements were $25,260, leaving a net loss to The Institute of $5,560 for the period.

It is expected that the rate of loss will decline during the balance of our fiscal year, since the volume of test work is normally slow during the summer months and since the increased prices for tests did not go into effect until June 1, 1958.

A new bulletin has just been printed and distributed describing the tests on refractories and showing the new rates as authorized by the Board of Directors at their May meeting. The test charges are increased an average of 15% in an attempt to offset the increased overhead charges at Mellon Institute.

W. A. Turner and Avery C. Newton visited Stuart Phelps, the Director of our Fellowship at Mellon, on August 19. Stuart reports a substantial current increase in orders for hot load tests.

He showed us scores of devices used experimentally in the way of altering the original design of the castable consistency meter so as to be able to measure mixes of a stiffer consistency. This work is being done in an effort to comply with the suggestions made by some producers after laboratory trials with the equipment. The work is now in the stage of trials with a number of commercial castables, and it should not be too long before the revised test can be reevaluated in the field.

He also showed us new equipment, largely designed and assembled by the Fellowship staff, to record photographically the pressure and platen movement during dry pressing operations.

Mention was made of the thermal spalling test for silica brick, which the Fellowship began developing over 20 years ago. The test has not been used to any extent until recent years, but a number of laboratories have now installed the equipment and Committee C-8 of A.S.T.M. will discuss its adoption during the fall meeting of the

A technical bulletin entitled "Refractories for Glass Furnace Checker Brick" by Frank McRitchie, Research Assistant at the Fellowship, will be published this month.

At the last Board meeting, The Institute's Secretary was instructed to determine which members planned to install thermal conductivity test equipment in their own laboratories and to ask them to secure bids on the construction of two or more units. The purpose was to see if the unit price would be sufficiently reduced to warrant The Institute purchasing and installing one at the Fellowship.

Only two companies reported plans to install such equipment and one has since dropped the project. The other company is currently building the equipment for installation in its new lab. The company is doing much of the work in its own machine shop and reports very little, if any, saving could be obtained by building two units at the same time.

The cost of this equipment has been estimated at around $18,000 plus installation cost. A trained technician would be needed to operate it. Test charges would range from $250-$600 depending upon the type of refractory tested. The demand for this type of test is unknown.

Your committee recommends that The Institute send a questionnaire to the membership seeking advice on the probable number of tests per year over a three year period which each member company might require. With that information, the committee will be in a better position to make a recommendation.

Respectfully submitted,
W. ALFRED TURNER, *Chairman.*

REPORT OF THE TREASURER

5 Months, April 1-August 31, 1958

Receipts		
Dues	$48,521.00	
Mellon Institute Tests	19,704.47	
Miscellaneous	1,229.52	
Total		$69,454.99
Disbursements		
Audit and Legal	$ 3,042.50	
Dues and Subscriptions	273.52	
Furniture	93.68	
Meeting Expense	4,720.46	
Mellon Institute Fellowship	25,266.45	
Mellon Institute Research	14,535.03	
Office Expense	2,134.69	
Pension and Insurance	2,241.71	
Percentage Depletion	829.92	
Printing and Publishing	1,926.50	
Rent	942.00	
Salaries, Net	7,905.10	
Taxes	2,580.49	
Telephone and Telegraph	278.18	
Travel	1,256.34	
Miscellaneous	25.50	
Total		$68,052.07
Surplus		$ 1,402.92
Add Cash Balance April 1		$24,964.93
Add Savings Account		20,482.02

ATTENDANCE LIST

Active Members

Acme Brick Co.
Mr. and Mrs. G. Puls

The Aetna Fire Brick Co.
Mr. and Mrs. L. F. Sims

The Babcock & Wilcox Co.
Mr. and Mrs. J. E. Brinckerhoff
Mr. and Mrs. C. L. Norton
Mr. M. J. Terman

The Carborundum Co.
Mr. R. A. Barr

Cedar Heights Clay Co.
Mr. and Mrs. D. E. Morgan

The Cordol Corp.
Mr. and Mrs. C. L. Corson

The Davis Fire Brick Co.
Mr. and Mrs. E. R. Davis
Mr. and Mrs. J. L. Cummings

The Denver Fire Clay Co.
Mr. and Mrs. R. C. Shepard
Mr. and Mrs. W. O. Brandt
Mr. and Mrs. C. J. Gerbig

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Mr. and Mrs. F. H. Laube

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Mr. and Mrs. W. A. Porter

A. P. Green Fire Brick Co.
Mr. and Mrs. A. R. Barnett
Mr. and Mrs. M. D. McClain

Harbison-Walker Refractories Co.
Mr. and Mrs. C. A. Brashares

Illinois Clay Products Co.
Mr. and Mrs. H. F. West

The Ironton Fire Brick Co.
Mr. J. H. Rickey, Jr.

Johns-Manville Sales Corp.
Mr. N. J. Kent

Kyanite Mining Corp.
Mr. G. Dixon

E. J. Lavino and Co.
Mr. and Mrs. G. T. Stowe

Malvern Brick & Tile Co.
Mr. G. B. Eyerly

McCrady Refractories, Inc.
Mr. and Mrs. L. C. McCrady

Mexico Refractories Co.
Mr. and Mrs. W. B. Leach
Mr. E. C. Tinsley

National Refractories Div. Mexico Ref. Co.
Mr. R. A. Hitchins

New Castle Refractories Co.
Mr. and Mrs. R. W. Rowland

North American Refractories Co.
Mr. and Mrs. E. W. Valensi
Mr. and Mrs. H. H. Hopwood

Pacific Clay Products
Mr. and Mrs. J. C. Culhane

Plibrico Co.
Mr. and Mrs. R. W. Schaefer

H. K. Porter Company, Inc.
Mr. and Mrs. W. A. Turner

The Ramtite Co.
Mr. and Mrs. T. Kaufcom, Jr.
Mr. and Mrs. G. V. Campbell

Refractory Specialties Co.
Mr. and Mrs. W. T. Tredennick
Mr. and Mrs. R. F. Posluszny

H. C. Spinks Clay Co., Inc.
Mr. and Mrs. R. B. Carothers

The Standard Fire Brick Co.
Div. A. P. Green Fire Brick Co.
Mr. J. L. MacFarlane

Hiram Swank's Sons
Mr. A. M. Swank
Mr. B. A. Rhine

Valentine Fire Brick Co.
Mr. W. H. Peterson, Jr.

Walsh Refractories Corp.
Mr. and Mrs. J. J. Duggan
Mr. and Mrs. W. K. Schweickhardt

Wellsville Fire Brick Co.
Mr. and Mrs. L. E. Whitesell

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Battelle Memorial Institute
Mr. L. S. O'Bannon

The Bonnot Co.
Mr. R. R. Bush

Chambers Brothers Co.
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Chisholm, Boyd & White Co.
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Crucible Steel Co.
Mr. J. R. Richards
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Harrop Ceramic Service Co.
Mr. and Mrs. G. D. Brush
Mr. and Mrs. W. H. Schotts

Honorary Associate Member

Mr. and Mrs. J .C. Evans

Others

Mr. W. J. Kenney, TRI Counsel
Mr. O. E. Miller

Mr. and Mrs. A. C. Newton, TRI
Mr. and Mrs. F. Burdick, Brick & Clay Record
Mr. and Mrs. J. Svec, Brick & Clay Record

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