News of the Month...

Hercules to Double BHT Capacity

Plans for an extensive addition to production facilities at its oxychemicals plant in Gibbstown, N. J., are announced by Hercules Powder. The expansion program involves doubling production capacity of *p*-cresol and its derivatives.

A previously announced addition at Gibbstown for the production of 3 million pounds of *p*-cresol annually, together with facilities for its conversion to butylated hydroxytoluene, is scheduled for completion late in October or November. Under the new expansion program, the capacity of this unit will now be increased to 6 million pounds of *p*-cresol annually. The production capacity of BHT, antioxidant for animal feeds, will also be doubled. Hercules officials revealed that the company has under development a new antioxidant using *p*-cresol as one of the basic raw materials.

Woonsocket to Expand Nitro-Form

Woonsocket Color & Chemical directors have approved plans to expand its Nitro-Form agricultural chemical division to the tune of \$500,000 to \$750,000. The division is also to be split into a separate corporation. Stocks and debenture loans are to be used for financing it. The company stated the new firm's underlying purpose would be to sell and promote urea-formaldehvde nitrogen compounds and such products as granulated insecticides, herbicides, and chelating agents. The company also envisions eventual basic production of formaldehyde and urea-formaldehyde slurries for the fertilizer industry.

Lilly Lowers Stilbestrol Price

An 18% reduction in the price of the cattle growth stimulant Stilbosol (diethylstilbestrol) has been announced by the agricultural and industrial products division of Eli Lilly & Co.

This is the third major cut in the price of Stilbosol since the product was first offered to feed manufacturers for inclusion in cattle feeds. Altogether, the price of Stilbosol has been reduced about 35% from its original price.

Lilly offers its diethylstilbestrol premix to the feed trade under exclusive license from the Iowa State College Research Foundation, which was recently granted a patent on this premix. Original research work that established diethylstilbestrol as a gain stimulator was conducted by Wise Burroughs and associates at Iowa State College.

Recent extensive tissue tests by the Food and Drug Administration have also confirmed previous findings by state experiment stations that no detectable amount of stilbestrol is present in meat from steers fed this substance in fattening rations.

Koppers Designates 3 Distributors for BHT

Three distributors for its food-grade antioxidant, BHT (butylated hydroxytoluene), have been designated by the chemical division of Koppers Co., it is announced. They are McKesson & Robbins, Inc., of New York City; Peter Hand Foundation, of Chicago; and Ray Ewing Co., of Pasadena, Cal. These distributors will be primarily concerned with supplying the needs of the animal feed industry for this antioxidant.

Koppers BHT is sold as a free-flowing, finely ground powder, which exposes more of the protective antioxidant surface to the feed and assures more uniform and thorough distribution. In addition to the powder form, BHT is also available for wet mixing in the form of white crystals, which are soluble in fats, oils, and greases.

Victor to Build 5th Phosphorus Furnace in Tenn.

Victor Chemical Works plans to construct a 35,000 kw. electric furnace for the production of elemental phosphorus at the company's plant at Mount Pleasant, Tenn. The new furnace will make a total of five electric furnaces at the Mount Pleasant plant. It is expected that the new furnace will begin operating during the last half of 1957.

Wisconsin Firm to Build State's First Liquid Fertilizer Plant

Elkhorn Chemical Co. at Elkhorn, Wis., has announced plans to build a liquid fertilizer plant, said to be the first in Wisconsin. J. C. Carlisle Corp. of Denver will engineer and construct the plant (model 7891), which is to consist of aqua ammonia converter and reactor circuit capable of producing approximately 20 tons per hour of complete liquid fertilizer. Elkhorn will market the liquid to farmers in

the immediate area. In outlying territories, the company will set up a program to educate the company's distributors for applying and selling the product.

Harris Laboratories Announces Expansion

Harris Laboratories, Lincoln, Neb., announces purchase of Alfalfa Processors Laboratory, Omaha, Neb. and will move all equipment to its Lincoln offices. Clients of Alfalfa Processors Laboratory will be provided with the same services at the new address. The purchase is part of Harris' plans to provide additional consulting and testing laboratory services to feed, fertilizer, and insecticide manufacturers.

Lewis E. Harris, president of Harris Laboratories, announced that this acquisition of Alfalfa Processors Laboratory will permit more rapid expansion in the field of soil testing and farm management services, as well as provide additional facilities for research work in the utilization of agricultural by-products.

Coronet Stops Producing 14.5% Defluorinated Phosphate

Coronet Phosphate Co. announces it will discontinue manufacture of its 14.5% grade defluorinated phosphate (CDP). Instead the company will produce a 17% grade, which the company sales manager, Henry Highton, says is preferred by consumers. The guaranteed analysis of the product is: 17.0% minimum phosphorus, 34.0% minimum calcium, and 0.17% maximum fluorine. Prices, f.o.b. Coronet, Fla., are \$58 a ton bagged and \$55 a ton bulk.

Grain Processing Adds to Research Facilities

Grain Processing Corp. has announced it will add to its research facilities with the building of a 12,000 square foot laboratory, construction of which has already begun.

The Muscatine, Iowa, producer of riboflavin, vitamin B_{12} , grain alcohol, and feed supplements plans to develop new products through primary fermentation processes. Research in the new building will be primarily along chemical, biochemical, and nutrition lines. The expanded program will be headed by Austin M. Hanson, director of research. Head of bacteriology is Ronald C. Malzahan and head of biochemical research is Alpha L. More-

house. Grain Processing also has a pilot plant and experimental farm for testing products on animals.

Geigy Moves to Ardsley

Geigy Chemical Corp. announces the moving of its headquarters from New York City to Saw Mill River Road, Ardsley, N.Y. The corporation's agricultural chemicals, industrial chemicals, and pharmaceuticals divisions opened for business in Ardsley the first week of August. The dyestuffs division, coloristic and chemical research laboratories are to move to Ardsley this month.

Monsanto Equalizes Freight on Ammonium Nitrate

Monsanto announces it began equalization of freight July 1 on ammonium nitrate with Hopewell, Va., Sheffield, Ala., and Savannah, Ga. This applies on material shipped from its plants at Luling, La., and El Dorado, Ark.

Fertilizer Made from McKeesport Garbage

Organic Corp. of America has completed a plant at McKeesport, Pa., for transforming the city's garbage into an organic fertilizer. The new plant utilizes an enzyme process developed by H. G. Burr Co.

MGK Appoints Canadian Agent

McLaughlin Gormley King Co. announces that it has appointed Allied Basic Chemical Co., Ltd., as its agent in Canada for sales of its full line of chemicals. Allied Basic has offices at 35 Anderson Ave. in Toronto and 1100 Craig St. East in Montreal.

Royalty-Free Licenses Granted on Feed Containing Penicillin

Merck & Co., Inc., has announced it will grant royalty-free licenses to all feed manufacturers marketing feeds containing penicillin. The company was awarded a patent covering animal feeds containing penicillin for growth promotion on July 3.

BUSINESS AND FINANCE

Stauffer Announces Record Earnings and Sales

Record six months earnings of \$6,625,000 or \$2.17 per share for the period ended June 30 are announced by Stauffer Chemical. Net earnings increased 9% from the \$6,089,000 or

\$2.00 per share during the corresponding period in 1955. Net sales of \$77,410,000 comprised a new high for the six months, up 11% from \$69,787,000 during the comparable period of 1955.

Net sales for the three months ended June 30, 1956, increased to \$40,897,000 from \$36,513,000 in the previous quarter and \$38,149,000 in the 1955 June quarter. Net earnings for the second quarter this year were \$3,612,000 or \$1.18 per share, compared with \$3,013,000 or 99 cents per share for the first quarter and \$3,570,000 or \$1.17 per share for the June quarter last year.

Mr. Hans Stauffer, president, reported to stockholders that "a net increase in sales volume was achieved in existing product lines, despite the downturn in fertilizers and in the textile and rubber industries which are important consumers of the company's products."

Continental Postpones Merger Meeting; 1st Half Sales Hit High

The Continental Can Co. stock-holder meeting to consider proposed merger with Robert Gair Co. has been delayed by the Government's action to prevent CCC's acquisition of Hazel-Atlas Glass Co. Company officials say they have not abandoned plans for the merger.

Six-month sales through June 30, 1956 were \$355,943,000 an increase of 16% over 1955 figures. Net earnings totaled almost \$14.5 million compared with \$10.3 million last year.

Sales, Profits Higher for American Potash

Sales and earnings of American Potash & Chemical for the first half of 1956 were higher than in the comparable period a year ago, President Peter Colefax reports to shareholders.

Net sales for the six months ended June 30 totaled \$19,956,846 compared with \$13,828,853 for the corresponding months of 1955.

Net income for the first half of this year amounted to \$2,396,625. After deducting preferred dividend needs, earnings were equal to 39 cents per share on Class A and common stocks outstanding. For the first six months of 1955, net income was \$1,847,898, equal after preferred dividends to \$1.18 a share after adjusting for the 2.5 to one stock split in April of this year.

For the second quarter of this year, the three months ended June 30, sales amounted to \$10,460,918 as compared

with \$7,077,619 in the same quarter a year ago. Net income was \$1,201,717, or 70 cents per share, against \$1,011,264 or 65 cents per share a year ago.

Hercules' Six Months' Net Reported at \$120 Million

Hercules Powder reports net sales of \$120,433,778 for the first half of this year. In the same period of 1955, net sales were \$112,562,077.

Net income for the period was reported as \$1.18 a share, compared to \$1.13 last year. Second quarter earnings were 63 cents a share this year and 62 cents last year.

CSC's Sales Up 10%

Commercial Solvents reports earnings of \$663,026 or 26 cents a share for the second quarter of this year. Earnings of 29 cents a share in the second quarter of 1955 included 12 cents a share of extraordinary net income. The total for the first half was \$1,572,843 on sales of \$27,474,486, compared with the 1955 figures of \$1,572,171 earnings on \$24,956,927 in sales.

Pennsalt Reports Higher Earnings

Pennsylvania Salt Mfg. Co. reports net earnings totaling \$2,147,972 for the first six months of 1956. This was equivalent to \$1.73 per outstanding share. Earnings for the comparable period in 1955 were \$1.59 per share. Second quarter earnings of \$1,252,810 showed a gain of 40% over the first quarter of 1956.

Sales for the first half of 1956 totaled \$37,118,293, up 9% over the corresponding period last year. Second quarter sales were \$19,862,226, an increase of 6% over the second quarter of '55 and 15% higher than the first quarter of this year.

Michigan Chemical Shows 73% Increase in Profits

Michigan Chemical figures for the six months ended June 30 showed net income of 45 cents a share of common stock as compared to a profit of 26 cents a share in the first six months of 1955, an improvement of 73%.

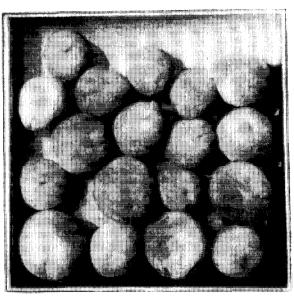
The earnings were \$244,923 in 1956 against a profit of \$141,238 in the comparable period in 1955. Because of depletion allowances, no taxes were required in either year.

Sales for the period were \$3,588,997 in the 1956 period and \$3,311,911 in the 1955 six months, a gain of 8%.

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FERTILIZERS
MAKE
THE
DIFFERENCE



with sufficient potash



without sufficient potash

It makes quite a difference in size and yield—and in the farmer's profit, too—when the basic nutritive elements in a soil are replenished with balanced fertilizers. Potash, a necessary ingredient of these balanced fertilizers, builds up the resistance of crops to diseases, while increasing both quality and yield.

USP's high-grade muriate of potash has the highest K_2O content and is free-flowing and non-caking—important advantages in the manufacture of these modern fertilizers which help American farmers to better crops and better incomes.

UNITED STATES POTASH COMPANY

DIVISION OF UNITED STATES BORAX & CHEMICAL CORPORATION

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HIGRADE MURIATE OF POTASH 62/63% K₂O GRANULAR MURIATE OF POTASH 60% K₂O MIN.

The second quarter showed an improvement in net earnings to \$192,560, against \$111,388 in 1955, equal to 36 cents a share for 1956 as compared to 20 cents a share for the 1955 second quarter. Sales were \$2,099,715 in the 1956 second quarter against \$1,723,282 in the similar period of 1955.

Atlas Powder Six Months' Net Up 32%

Atlas Powder Co. had net earnings of \$2,235,317, or \$2.99 a common share, in the first half of 1956, Ralph K. Gottshall, president, announces. This was 32% above the \$1,688,183, or \$2.23 a common share, earned in the same period last year.

Second quarter net earnings for 1956 were \$1,275,464, or \$1.71 a common share, against \$923,845, or \$1.10 a common share, for the second quarter of 1955.

Sales and operating revenues in the first six months of this year totaled \$32,960,489, up 7% from the \$30,861,192 for the first half of 1955.

Operating results of Aquaness Corporation, which has been a department of Atlas' chemicals division since

Toxicity W Testing and consultation in regard to regulations and requirements of the Food and Drug Administration, Acute and subacute toxicity. Chronic, long-term growth and reproduction studies employing large and small animals, Skin and mucous membrane irritation tests. Other biological, chemical and microbiological services. Write for price schedule WISCONSIN ALUMNI RESEARCH FOUNDATION **WISCONSIN ALUMNI** RESEARCH FOUNDATION O. BOX 2217-A • MADISON 1 WISCONSIN

January of this year, have been included in both the 1955 and 1956 figures.

Dow Sales Up 20%, Pass Half-Billion Mark

Dow Chemical Co. sales for the first half of fiscal 1956 (through May 31) were a record \$565 million, representing a 20% increase of last year's \$470 million.

Net earnings were up 59% to \$59.7 million. Over half of total sales revenue was accounted for by chemicals, with 6% from agricultural chemicals.

2nd Quarter Sales of Monsanto Up

Sales of Monsanto and its consolidated subsidiaries for the second quarter of 1956 were \$139,645,541 compared to \$133,495,712 for the same period in 1955, it is announced.

Second quarter 1956 earnings of \$10,719,295 amounted to 51 cents a share of common stock, an increase from 1955 second quarter earnings of \$10,287,348 which amounted to 49 cents a share.

Sales for the first six months this year were \$280,256,773 and earnings were \$1.05 per share compared to sales of \$266,203,707 and earnings of \$1.16 a share for the first six months of last year.

These figures include those of the Lion Oil Division for both years. Lion was merged into Monsanto on Sept. 30, 1955.

Eli Lilly Sets Record in Sales for First Half

Eli Lilly reports a record sales volume for the first six months of this year. Estimated figures put consolidated net sales at \$90 million, a 44% increase over the mid-1955 total. The estimate for net income in the first half was put at \$16.6 million as compared with \$6.8 million for the first half of last year.

Olin Mathieson Reports 11% Sales Increase

Olin Mathieson reports domestic and Canadian sales during the six months ended June 30 of \$300,050,-408, an increase of 11% over the \$270,800,964 reported in the first half of 1955.

Net income totaled \$21,603,517, or \$1.63 a share, compared with net income in the same period last year of \$19,941,739, or \$1.60 a share.

For the three months ended June 30, 1956, Olin Mathieson's sales

totaled \$155,709,731, an increase of approximately 10% over total sales of \$142,103,684 in the second quarter of 1955. Net profit in this period rose to \$11,523,418, compared to \$10,998,502 for the second quarter of last year. This was an increase of approximately 5%.

Earnings in the past quarter equaled 87 cents per share of common stock, compared with 88 cents per share earned during the second quarter of 1955 on a substantially smaller average number of shares outstanding.

National Distillers Increases First Half Net 48%

Earnings of National Distillers for the first half of 1956 increased by 48% over the similar period of last year, John E. Bierwirth, president, announces. Net earnings for the six months ended June 30 totaled \$10,-107,701, up \$3,296,457 from the \$6,811,244 net reported for the first half of 1955. The 1956 earnings equal \$1.08 a share after provision for preferred dividends, against 69 cents a share for the 1955 period.

The increased earnings for the first half of 1955 result from net sales of \$264,910,122, up \$30,341,160 or almost 13% over sales of \$234,568,962 for the first six months of 1955.

Net earnings of National Distillers for the second quarter of this year were \$5,070,537, an increase of \$1,617,958 over net of \$3,452,579 for the second three months of 1955. Earnings per share were 54 cents against 35 cents and net sales of \$138,264,730 compared with \$121,883,689.

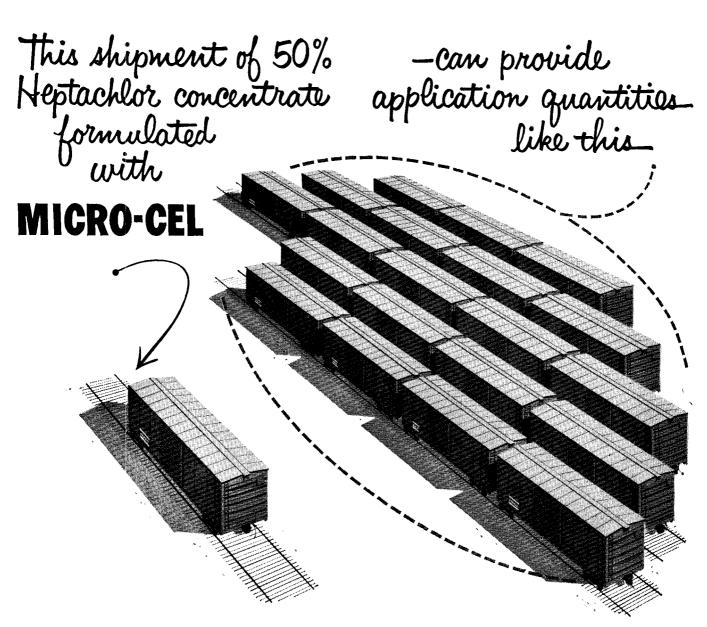
Diamond Alkali Reports Sales and Earnings Records

Sales and earnings of Diamond Alkali set new records in the first half of 1956, it is reported by John A. Sargent, president.

Net sales of Diamond chemicals for the current six months totaled \$61,-609,242 compared to the previous high of \$53,660,322 a year ago, representing an increase of 15%.

Net income for the first half of 1956 was \$5,550,271, which, after preferred stock dividends, is equivalent to \$2.11 per common share. This represents a gain of 37% over the previous high in 1955 of \$1.53 per share computed on the same number of shares.

Second-quarter 1956 net sales totaled \$31.752,755 against the former second-quarter high of \$29,-189,278 in 1955, a gain of 9%. Net



The advantages of formulating insecticide dusts at the higher concentrations obtainable with Micro-Cel* is graphically demonstrated by the freight cars above. One car of 50% Heptachlor when let down to a 2½% poison at the point of application produces the equivalent of 20 cars of insecticide in the field. Since Micro-Cel costs no more than many other diluents, the substantial freight savings mean extra profits for you.

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Micro-Cel, a new line of synthetic calcium silicates developed by Johns-Manville, has been tested and proven at such high dust and wettable powder concentrates as:

75% DDT 70% Toxaphene 75% Aldrin 75% Dieldrin 50% Aramite 50% Chlorodane

Experiments with other poisons are under way today.

IMPROVES FLOWABILITY

Micro-Cel—"the powder that flows like a liquid"—reduces caking, increases flowability and gives more uniform coverage with dry dusts. Other important properties include large surface area, small particle size and high bulking action.

Ask your Celite engineer to help you adapt Micro-Cel to your particular requirements, or mail coupon below.

*Micro-Cel® is Johns-Manville's new absorbent-grinding aid designed specifically for the insecticide formulator.

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	Please send further information; samples of Micro-Cel. I a interested in using Micro-Cel with the following poisons:	am
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Now-for direct application . . .

highest quality.. granulated triple super



Just one trip across the field with this dustless, easy-to-handle, granulated 0-45-0 will make a repeat customer out of a trial user. Cash in now on fall sales.

Builds customer satisfaction and repeat sales

You'll like the compliments you'll get after your customers have tried your new 0-45-0 from International for the first time.

Look at typical comments from users of this high-quality triple:

"It sure goes on easy." (You bet it does! It's granulated for easy going through any fertilizing rig.)

"Pleasure to use." (Yes . . . and just one downwind trip across the

field will prove it to anyone... will build more repeat sales than a dozen sales talks.)

"Saves time and money." (Now your customers can avoid breaking up lumps in the bag or stopping in the middle of a field to kick a clogged-up rig. Easy to handle... just fill the fertilizer hopper and push off. Easy to put on.)

What's more, agronomists can

tell you the high availability of this superior product delivers results that build farmer satisfaction and repeat sales. The reason: special processing and manufacturing care produces a triple that resists reversion in the soil . . . supplies growing plants the phosphorus they need when they need it.

Call or write International today for samples and complete details.

free-flowing...top-performing that sells itself on sight

bagged under your own label...
shipped direct to your dealers*

Here's a new triple super you'll be proud to add to your own line of fertilizers... the new, granulated 0-45-0 from International Minerals and Chemical.

This superior triple can be shipped in bulk, or International will be happy to have it bagged in adequate quantities under your own label . . . ship direct to your own dealers, too, if you like.

Here's what this can mean to you:

- A top-quality triple super that carries your own private label and complements the rest of your line.
- A modern, easy-to-use, top-performing triple super that will bring you increased

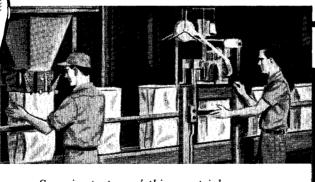
customer satisfaction and plenty of repeat sales.

 The unbeatable convenience of distributing this high-quality product under your own brand name direct to your dealers without touching a single bag.

What's more, you'll find that dealing with International is a pleasure. You'll appreciate the friendly cooperation from International's transportation department . . . the fast service . . . and the reliability of supply.

See your International triple-super sales representative soon for complete details on minimum order requirements, price and delivery information. He'll be glad to show you samples. And one look at this new 0-45-0 will show you why you can't get a better deal than this new triple super now available for direct application sales.

*subject to minimum order requirements



Profit now from this superior 0-45-0. Bagged under your own brand name.

0.45.0

YOUR

Superior texture of this new triple super, put up in your own bags, stores without caking. It's granulated for easy going through any fertilizer attachment.

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PHOSPHATE CHEMICALS DIVISION

INTERNATIONAL MINERALS & CHEMICAL CORPORATION

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earnings for the second quarter of the current year amounted to \$2,716,-800, or \$1.04 per share on 2.604.351 shares, compared with \$2,412,668, or 93 cents per share for the corresponding 1955 quarter.

Merck Income Up 33%

Sales of Merck and its subsidiaries for the first half 1956 increased 13% and net income increased 33% over the first half of 1955, Merck an-

Estimated sales and earnings for the first half 1956, compared with the prior period, are shown below.

> First Half 1956 1955 \$87,066,000 \$77,124,000

Net income after taxes 10,294,000 7,739,000 Earnings per

common share 98¢

Sales

Second quarter sales were \$43,466,-000, compared with \$38,316,000 for the second quarter of 1955. Net income for the second quarter 1956 amounted to \$4,694,000, resulting in 45 cents per share of common stock. compared with \$3,498,000, or 30 cents per common share, in the like 1955 period.

ASSOCIATIONS

WACA Meeting

The Western Agricultural Chemicals Association has scheduled its fall meeting for Oct. 9 at the Villa Hotel in San Mateo, Calif. Among the speakers will be H. C. Moore, president of the Agricultural Aircraft Association, Inc., of California,

Nitrogen Solutions Group Hires Management Firm

The National Nitrogen Solutions Association announces it has retained the association management firm of Storms and Westcott to handle all of the affairs of the association under the direction of the officers and board. The firm is located at 2217 Tribune Tower, Chicago, Ill.

The association also announces that the following activities will be implemented soon: a monthly newsletter to all members, regular news releases from the association to the trade and business press, a membership drive. news releases to be available to mem-

bers for use in local papers, development of grants and aid to colleges for nitrogen and liquid fertilizer experiments.

The executive secretary appointed by the board is Muriel F. Collie, staff counsel and executive assistant in the Storms and Westcott firm.

The association plans to meet in Sioux City, Iowa, Oct. 15 to 17 for its business sessions and trade show.

Northeastern Weed Control Meeting in New York

The 11th annual meeting of the Northeastern Weed Control Conference will be held Jan. 10, 11, and 12, 1957, in New York City at the Sheraton-McAlpin Hotel. The program will be concerned with weed control in such crops as corn, wheat, soybeans, pastures, vegetables, strawberries and orchards; with weed control in lawns, golf courses, nurseries, ponds and streams; and with control of woodv plants and weeds along highways, railroads, power lines, and around industrial plants.

L. L. Danielson, Plant Physiologist at the Virginia Truck Experiment Station, Norfolk, Va., is president of the conference this year.

North Central Weed Control Conference in December

The North Central Weed Control Conference has annonuced it will meet at the Hotel Sherman in Chicago on Dec. 10, 11, and 12.

The conference invites papers from workers in industry, state departments of agriculture, USDA, educational institutions, and others. In addition to the sections on weeds, horticulture, botany and plant physiology, field crops, and regulations and extension, there will also be sections devoted to

CALENDAR

American Chemical Society, National Meeting. Atlantic City, N. J. Sept. 16-21.

Western Agricultural Chemicals Association. Villa Hotel, San Mateo, Calif. Oct. 9.

Middle West Soil Improvement Committee. Hotel Sherman, Chicago, Ill. Oct. 25.

North Central Weed Control Conference. Hotel Sherman, Chicago, Ill. Dec. 10–12.

Northeastern Weed Control Conference. Sheraton - McAlpin Hotel, New York City. Jan. 10-12, 1957.



Thomas PINCH CLAMPS

▶ For quick, convenient and safe mounting and dismantling of apparatus with spherical interchangeable ground glass joints



Fig. 1. Showing appearance of Sizes 12 and 18. Joint held securely by spring.



Fig. 2. Showing method of attaching to joint. Parts held securely by spring upon release of finger pressure.

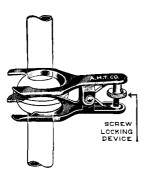


Fig. 3. Showing appearance of Sizes 28 to 75, incl., with locking device screwed into position.

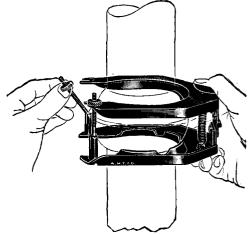


Fig. 4. Showing appearance of Size 102 and method of fastening in position.

THOMAS PINCH CLAMPS, (Patented). For use on spherical ball-and-socket and most semi-ball glass joints. Of brass, with smooth, black, corrosion resistant finish, and with strong, spring closed, forked jaws. With the two parts of the glass joint held in one hand, and the Clamp held between thumb and forefinger of the other hand, as shown in Fig. 2 and Fig. 4, the Clamp can be quickly slipped over the joint. When pressure is released, the two parts are held securely by the spring.

Sizes 28 to 75, inclusive, are provided with a screw locking device—as shown in Fig. 3—in addition to the spiral spring. Size 102 has flat hinge and spiral spring between the upper and lower jaws which permit adjustment of the clamp

over the joint with one hand. Two slotted posts, each fitted with hinged screw and knurled head nut, are provided at the mouth of the forked jaws to lock the clamp securely in position.

A considerable load can be suspended from the joint without danger of leakage. However, the Clamps are designed primarily for securing the joint and are not intended to replace the usual clamps, rings, tripods, etc., as ordinarily used for supporting glassware assemblies.

The use of these Clamps adds greatly to the convenience and speed of mounting and dismantling glass apparatus with spherical interchangeable ground joints, and reduces the possibility of breakage in handling.

Size number Carton contains	$\begin{array}{c} 7 \\ 12 \end{array}$	$\begin{array}{c} 12 \\ 12 \end{array}$	$\frac{18}{12}$	$\frac{28}{12}$	$\frac{35}{12}$	$\begin{array}{c} 50 \\ 12 \end{array}$	$\frac{65}{12}$	75 6	102
Takes standard spheri-	12	12	12	12	12	12	12	U	-
cal joint No	7/1	12/1	18/7	28/11	35/20	50/30	65/40	75/50	102/75
		to 12/5,	and	to 28/15,	and				
		incl.	18/9	incl.	35/25				
Minimum width of fork				222021					
opening in jaw, mm.	4.5	10	13	21	30	37	48	58	82
ach	.88	.80	.92	1.62	2.08	3.70	4.41	7.10	12.7



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industrial weed control, turf, and water weeds and weed control in wildlife habitats. F. W. Slife of the University of Illinois is chairman of the program committee.

PEOPLE

Davison Reorganizes

David N. Hauseman and W. N. Watmough, Jr., have been appointed vice presidents and general managers of the agricultural chemicals division and the mixed fertilizer division, respectively, under a reorganization of Davison Chemical. The realignment creates new operating divisions along product lines. Mr. Hauseman was formerly vice president in charge of marketing, while Mr. Watmough remains in essentially his previous position. Assistant general manager of the agricultural chemicals division is J. M. Harris, former manager of the company's phosphate division in Florida. William Caspari, Jr., is sales manager of agricultural chemicals. A. C. Mc-Call, formerly branch plant manager at Joplin, Mo., is to be executive officer

of the mixed fertilizer division. District manager offices of the mixed fertilizer division are to be eliminated.

Ray C. Smith, manager of market development for Sinclair Chemicals, has been appointed manager of domestic sales. Replacing him as market development manager is Robert C. Sweeney, who joined the department in 1952.

C. Tom Nixon has been named assistant secretary of Ashcraft-Wilkinson Co. He is also in charge of technical work in connection with the company's distribution of nitrogen, potash, and sulfur.

Robert F. Miller has joined the market planning department of the chemical division of Merck as a nutrition specialist. Formerly director of nutrition and research for The Park & Pollard Co., Dr. Miller will be primarily concerned with technical problems on ingredients for the feed industry.

Robert E. Treece has joined the extension entomology staff at Rutgers to handle demands for advice on insects that cause trouble in the home and on home grounds. He was formerly re-

search assistant at Cornell's ornamentals laboratory.

Nathaneal Rossin has transferred from National Distillers to its USI division as a member of special products section staff. He will help to coordinate sales and production activities for USI's feed supplements and pharmaceutical products.

Frank S. Washburn, general manager of the agricultural chemicals division of American Cyanamid, has been elected to the board of directors of the National Plant Food Institute.

William A. Haigh has been appointed supervisor of sales methods and training for the plant food division of International Minerals & Chemical. He was formerly with Oliver Corp.

P. J. Reno, sales manager of the agricultural chemicals division of the Hercules Powder naval stores department, has been named to succeed Richard T. Yates as manager of the division. Mr. Yates has been given a special assignment to investigate new fields of chemistry in which the company is interested. Coleman Edgar succeeds Mr. Reno as sales manager. Replacing Mr. Edgar in export sales and in government liaison work is Henry F. Pierce, former technical sales representative in Los Angeles.

Lloyd K. Riggs has joined the staff of Evans Research & Development as senior scientist. His appointment is part of the company's expanding program in food research. Dr. Riggs was formerly director of research for Kraft Foods and director of research for National Dairy Research Laboratories.

Henry E. Wessel has been promoted by International Minerals to manager of product development, and Emanuel Heimberg has been moved up to manager of market analysis.

Leo R. Gardner, vice president, director, and manager of research and development, of Calspray, and Howard J. Grady, vice president and eastern regional manager of the company's marketing department, have both been awarded 30-year service pins by Calspray. The company's chief analyst, R. W. Garret received a pin commemorating his 25 years of service.

William W. Wilson has been named manager of terminals for the petrochemicals division of Commercial Solvents. He will continue to make Sterlington, La., his headquarters.

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*Endothal is the accepted generic name for 3, 6-endoxohexahydrophthalic acid. The manufacture and use of endothal products are covered by one or more of the following U. S. patents: 2,550,494; 2,576,080; 2,576,081; 2,576,083; other pots. pend.

Through pioneering research and development of defoliants and desiccants, PENNSALT has become a leader in this field of agricultural chemicals. Because chemical harvest aids make harvesting easier, more economical and, therefore, more profitable, the use of these products is rapidly increasing. Through technical development, PENNSALT is constantly striving to improve its widely used defoliants and desiccants. In the meantime, in seeking a perfect defoliant, several candidates are being field tested. The newest one is PENCO DESICCANT L-10, which is available only in Texas this season for use on cotton.

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Dwight B. West, chief chemist for J. E. Siebel Sons' Co., has been named chairman of the technical committee of the American Society of Brewing Chemists.

Gordon Christensen has been named sales manager of the feed division of Red Star Yeast & Products. He was formerly vice president and sales manager of Specifide, Inc.

R. Merton Love, professor of agronomy on the University of California campus at Davis, has left for New Zealand, where he will study ways to improve California's grazing lands. On a Fulbright award, he is to return to the campus in the fall of 1957.



Donald F. Starr, consulting chemist specializing in agricultural chemicals, has joined V. D. Anderson Co., Cleveland Ohio, division of International Basic Economy Corp.

as director of research. He was formerly senior chemist with USDA.

A. M. Boyce has been named acting provost of the University of California, Riverside. He will serve as chief administrative officer of the campus until a successor to recently retired provost, Gordon S. Watkins, has been appointed. Dr. Boyce has served as chairman of the department of entomology at Riverside and more recently as director of the Citrus Experiment Station.

Thomas Hurst has been named an assistant director of research for Monsanto's inorganic chemicals division. He succeeds Peter Arvan, who has been transferred to the division's sales department. Robin Russell follows Hurst as group leader at Monsanto, Tenn., and Robert T. Webber becomes leader of the fertilizer process group at El Dorado, Ark.

William A. Hadfield retired July 31 from his position on Pennsalt's technical staff. He pioneered in the field of chlorine sanitation on the farm and in dairy plants and was instrumental in developing the company's system of chlorine sanitation.

J. William Zabor has left Pittsburgh Coke & Chemical to become director of research for Wyandotte Chemicals. R. M. Richey, has been transferred from superintendent of the southeastern division of American Agricultural Chemical Co. to superintendent of the western division. H. B. Houghtaling, formerly superintendent of the Cleveland works, succeeds him as superintendent of the southeastern division.

Anthony E. Cascino has been appointed to the newly created post of director of marketing for International Minerals. He is to be responsible for coordinating the marketing activity of each of the company's six product divisions. He has been in a similar capacity with the Crosley and Bendix divisions of Avco Mfg. Co.

Gordon Holz, secretary-treasurer of Paul-Lewis Laboratories, Inc., is making a survey of agricultural practices in east and central Africa as they relate to the commercial interest of the firm

John L. Cassullo, former treasurer of Fritzche Bros., Inc., has been named to presidency of the firm, succeeding John H. Montgomery, who is retiring.

Elizabeth Ramsey has been appointed head of the enlarged microbiological department of Leberco Laboratories, Roselle Park, N. J.

T. H. Hopper, head of the analytical, physical-chemical, and physics section of USDA's Southern Regional Research Laboratory, has been awarded the Superior Service Award from USDA for his research on the utilization of southern farm crops. Also awarded Superior Service Awards were Mrs. E. L. Skau, SRRL librarian, and a group from the engineering and development section, for originating the filtration-extraction process of extracting oil from cottonseed and other oilseeds. Included in the group are: E. L. D'Aquin, P. H. Eaves, H. K. Gardner, Jr., E. A. Gastrock, L. L. Holzenthal, N. B. Knoepfler, H. L. E. Vix, J. J. Spadaro, and A. V. Graci, Jr.

Paul Steinke has joined the Paul-Lewis Laboratories as head of the bacteriology department. He was formerly with Chain Belt Co.

G. L. McGinty retired June 30 after 47 years with the Federal Meat Inspection Service. He was chemist in charge of the St. Louis laboratory of the Meat Inspection Branch of USDA. He will be succeeded by Foster D. Roach, who has been stationed at Chicago.

