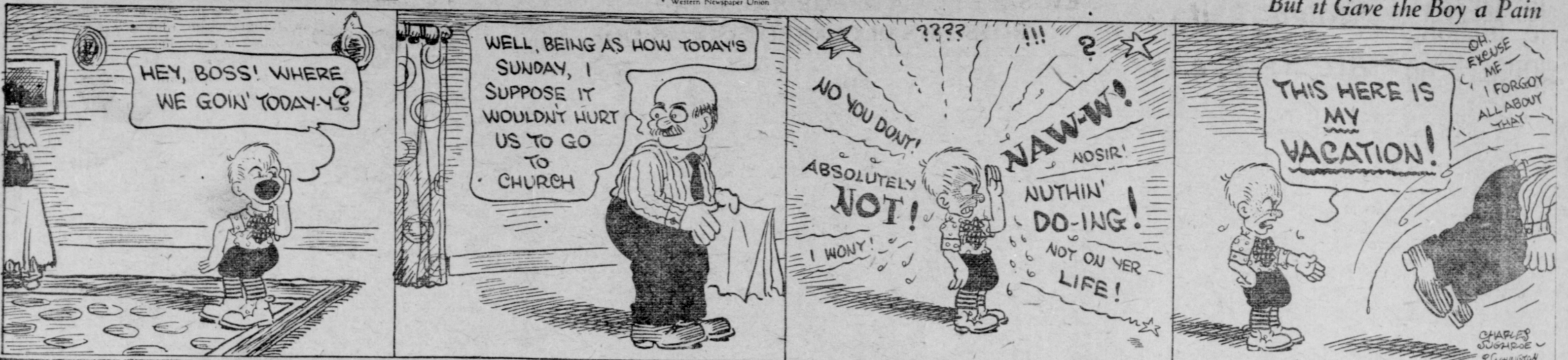


MICKIE, THE PRINTER'S DEVIL

By Charles Sughroe  
Western Newspaper Union

But it Gave the Boy a Pain



WAS NOT ENOUGH HELIUM FOR ZR-2

World's Supply of Nonexplosive Balloon Gas Would Not Have Filled Gas Bag.

PROFESSOR CADY GIVES FACTS

Tells of Government's Experiments With Helium and Cost of Producing It in Experimental Stages—Found in Three States.

Lawrence, Kan.—All the helium or nonexplosive balloon gas now available in the world would have been entirely inadequate to lift the ZR-2, the dirigible that was to have been the nucleus of America's air navy, according to a statement by Prof. H. P. Cady of the University of Kansas department of chemistry. Doctor Cady discovered that helium was a constituent of the natural gas of Kansas, Oklahoma and Texas, and performed notable experiments in the early days of the World War in developing processes for commercial production of helium. Before the war, he said, probably not more than a hundred cubic feet of this gas had been obtained in a fairly pure state, and that was secured at a cost of \$1,700 to \$2,000 a cubic foot for experimental purposes. Total production after extensive experiments by the United States government probably does not exceed 300,000 cubic feet up to the present, but while the cost of production has been reduced greatly, still this cost, compared to the cost of hydrogen, commonly used for inflating balloons, is tremendously high.

**Forced to Use Hydrogen.**  
"It is not strange, then," said Doctor Cady, "that England used the comparatively inexpensive hydrogen for the ZR-2. During the experimental stages the gas bag had to be emptied at times to allow changes in the structure. Practically the only place to get the helium is from the natural gas of Kansas, Oklahoma and Texas, and thus far processes of reduction have not been perfected. Only 1 per cent or less of the natural gas is helium, and this helium has to be refined to a purity of 90 per cent or better before it has the noninflammable quality demanded for safety in balloon construction."

"I am inclined to think helium never will come into general use for commercial airships, if such vehicles become common. The limited quantity of the material, its high cost and its value in war balloons probably will make it imperative for the government to reserve all helium for its own use." Doctor Cady explained that even the best balloon covers did not prevent entirely the escape of lifting gases, and it is necessary constantly to supply fresh gas. This is more true of hydrogen than of helium, but the wastage is there, and the continued operation of even a small fleet of war balloons would demand a constant supply of fresh helium. Experiments at the University of Kansas showed that the helium must be nearly 90 per cent pure in order to be safe. Similar experiments in Canada showed comparatively small explosions when mixtures containing only 75 per cent of helium were ignited.

**Find Helium in U. S.**  
The attempts to produce helium in commercial quantities in the United States date from 1916. The year before the English government had bought samples of gas from America in its search for helium for use in airships. The United States was not then at war and proceeded cautiously. Dr. R. B. Moore of the United States bureau of mines, who had received the British communication, recalled that Doctor Cady and his assistant, D. F. McFarland, had discovered the gas in unusual quantities in the mid-continent natural gas, and later Doctor Cady and C. W. Seibel, also of the University of Kansas, were employed in the plans for the construction later of three helium plants in Texas.

Two small plants were completed in March and May, 1918, and began the production of helium. Their output was not great, but 200,000 cubic feet of helium had been produced and much of it had been compressed into cylinders for shipment to France when the signing of the armistice made that unnecessary. A third plant at Petrolia, Texas, near Fort Worth, was completed a few days before the armistice, and experimentation was continued there after the war until halted by diminished appropriations.

Something to Think About

By F. A. WALKER

NOT ON BREAD ALONE

THERE is within all of us an ever-growing appetite which craves substantial nourishment for the soul. A sumptuous table heaped with palatable delicacies fails utterly to satisfy this hunger. With all our carnal gluttony we find ourselves at certain periods of our existence yearning for spiritual food. Wealth and luxury leave but an emptiness; poverty and sorrow distress and harden our hearts; the world is a cheat—a bauble that eludes us and leaves us in vagueness.

We may be talebearers, liars and thieves, but in our serious moments there comes upon us an overwhelming longing for something that will appease our appetite, besides bread alone.

We wish for the sustenance in which Truth and Mercy are blended, that our souls may be satiated, and our fever cooled. In ten thousand delectable forms it is spread out before us, but we rebel against accepting it.

Though we may be starving and weak to the point of falling we refuse to eat. In our misery and weariness we crave the everlasting Voice of Nature to lull us to sweet repose, yet in strange perverseness we fight to keep awake.

From all around us comes the call to the feast.

It comes from the silent starry nights; from the boisterous days; from the shimmering silver streams; from the dancing leaves of the forests; from songs of birds and sighing winds, but our eyes are heavy and our ears are dull.

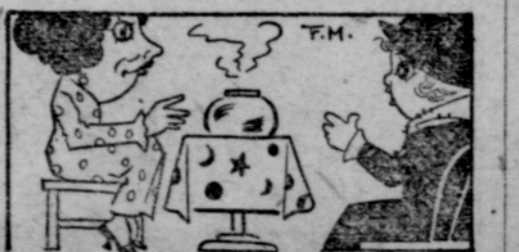
Right at our elbows is a dust-covered volume filled with uplifting encouragement and fatherly love, intended for guidance to the very happiness we desire.

But we let this great book lie in a dark corner untouched while we continue to stumble on and cry for peace.

We refuse to open our eyes when we ought to be wide-awake; we decline to close them when we ought to be asleep; we are wilfully headstrong and insistent upon having our own way.

We see not the good, but stroll and strut with evil. We are human; but within each one of us there burns the spark of divinity, and not until this spark shall be fanned by our own hand into flame, and kept burning by simple prayer and faith shall our hunger be fully satisfied.

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COURT NEWS

Probate Court.

Est. Squire S. Aiken. Petition. order.  
Est. W. H. A. Smith, Petition, order.  
Est. Eva Hockenyo. Final order.  
Ests. Emma A. Adams. Final report order.

Circuit Court.

C. B. Rostel vs. City of Medford. Summons.  
Mary Gomez vs. Edawrdo Gomez. Summons.  
Amy R. Thom vs. Lorenzo F. Thom. Summons.

C. B. Rostel vs. City of Medford et al. Suit for damages.

E. R. Seely vs. W. E. Croteau et ux. Summons.

Emil Britt et al. vs. Perry Gibson. Stipulation decree.

Ola D. Sutton vs. Lyka A. Hanscom et al. Affidavit, default, decree. Simonds Mfg. Co., vs. Southern Oregon Lumber Co. Objection to cost bill.

Anna Cottingham vs. Edward Cottingham. Certificate of service.

Mary Gomez vs. Edawrdo Gomez. Certificate of service.

Henrietta O'Connell vs. Wickluff O'Connell. Certificate of service.

R. S. Murray et al. vs. C. E. Pratt et al. Stipulation order of dismissal.

Edith Jones vs. Edyard J. Jones. Certificate of attachment.

Belle Nickell vs. Effie May Terrill

Reply. George Finley vs. Big Bend Milling Co. Objection to cost bill.

State vs. C. H. Owen. Verdict.

Real Estate Transfers

City of Medford to George W. Dow, et ux, lot 2, block 3, Olson addition to Medford, \$500.

Hattie E. Tighe et al to Claire P. Sedley et al, lots in Sams Valley, \$1.

George R. Lindley (ex.) to H. A. Kloepper, land in d. l. c. 77, twp. 37 S., R. 2 W., \$1000.

J. K. Howard et al to H. A. Kloepper, land in d. l. c. 77, twp. 37 S., R. 2 W., \$1.

Queen Anne Addition Inc., to E. Kelly, lots in blocks 7 and 11, Queen Anne addition to Medford, \$1.

A. J. Potts et ux to Sarah Witham, lots on Riverside avenue, Medford, \$10.

M. A. Barron to C. E. Froman et ux, lot on Church street, Ashland, \$10.

E. E. Kelly et ux to City of Medford, lots in amended plat of Queen Anne addition to Medford, \$1.

Joseph S. Warren to M. E. Horr, land in sec. 10, twp 39 S., R. 1 E., \$10.

J. M. Lofland et ux to L. M. Lofland, part d. l. c., 75, twp 37 S., R. 2 W., \$10.

Sheriff to City of Medford, lot 3, block 38, Medford, \$143.08.

Sheriff to City of Medford, lot on East Main street, eMedford, \$404.20.

Charles M. Wolgamott et ux to D. H. Cave, lot in block 2, Mingus subdivision to Medford, \$700.

D. H. Cave et ux to T. J. Ferguson et ux, lot in block 2, Mingus subdivision to Medford, \$10.

Big Winter Fair and Jackson County Christmas Edition

of the Daily Tidings will be issued Saturday, December 3. It will contain between thirty and forty pages, and carry a cover printed in three colors.

It will be the largest Christmas edition ever printed in Ashland, both in point of number of pages, circulation and general appearance. It will be well printed and will be distributed over the entire county.

We hope to have one or two sections featuring the Winter Fair, and will devote much of the space to boosting that enterprise.