

triumph and the crowd rushes in with flails and pitchforks. One tears what he thinks to be the skin, and causes a poisonous stench; again all retire. Shame, no doubt, now urges them on, and they tie the cause of alarm to a horse's tail, who gallops across the country, tearing it to shreds.

German and English copies of this print were published at Augsburg, Germany, and by John Wallis of Ludgate Street, London, and French copies in Paris.

The ascent of CHARLES and ROBERT from the Tuileries on December 1, 1783, produced a great profusion of prints.<sup>8</sup> Selected for reproduction here

8. The Katalog der Historischen Abteilung der Ersten Internationalen Luftschiffahrts-Asstellung (ILA) zu Frankfurt a.M. 1909, by L. Liebmann and G. Wahl (Frankfurt, 1912) lists more than 40 without exhausting the list.

(Plate 3) is one from the delightful series of de LAUNAY after de LORIMER, which was published by VACHEZ in both colored and uncolored states. These "are perhaps the best of all ballooning prints"<sup>9</sup> and several of them were used as illustration in FAUJAS de SAINT-FOND'S *description des experiences de la machine aerostatique* (Paris, 1783-4), which is "The chief contemporary authority for the details of the earlier ascents"<sup>9</sup>

Plate 4 shows CHARLES re-ascending alone after the signing of the *procès verbal* at Nesle and Plate 5 "is a highly imaginative picture of the triumphant return of the balloon to Paris the next day, showing it apparently still fully inflated with hydrogen and surrounded by flaming torches in dangerous proximity to the gas."<sup>9</sup>

9. W. Lockwood Marsh, *Aeronautical Prints and Drawings*, (London, 1924).

## C. I. T. NEWS

### LACEY OF CHEMICAL ENGINEERING NAMED DEAN OF GRADUATE SCHOOL

DR. William Noble Lacey, professor of chemical engineering was appointed Dean of the Graduate School in October. He succeeds Dr. Richard Chase Tolman, wartime vice-chairman of the N.D.R.C. Dr. Tolman resigned in order to devote more time to research and new duties as technical advisor to Bernard Baruch, United States representative on the United Nations Atomic Energy Commission.

Dr. Lacey has recently been designated as a recipient of the Anthony F. Lucas Gold Medal of the American Institute of Metallurgical Engineers for research on hydrocarbon behaviour. This award will be made in March 1947.

During the war Dr. Lacy was attached to the Eaton Canyon rocket project. He received his bachelor's degree at Stanford in 1911 and his master's and doctorate degrees at the University of California in 1913 and 1916. Before coming to the Institute in 1916, Dr. Lacey spent a year at M.I.T. as a research associate.

The graduate school deanship is not an honorary appointment. A great deal of work and responsibility will be added to Dr. Lacey's already crowded schedule. Recommendations for grants and other financial aids to graduate students are among the Dean's tasks. The great numerical expansion of the graduate school to 581 is instituting new problems.

A recently made curriculum change that Dr. Lacey must consider at close range is the addition last March of chemical engineering to the list of subjects in which the Ph.D. degree may be taken. Heretofore chemical engineering was offered as a minor subject in connection with the doctorate in chemistry or mechanical engineering.

The chemical engineering department is under the direction of Doctors Lacey and Sage. Chief research project now in progress is the American Petroleum Institute's hydrocarbon research now in its 20th year under Dr. Lacey's supervision. For the last nine

years, Dr. Sage has co-sponsored this research.

The behaviour of hydrocarbon mixtures under conditions found in underground petroleum and natural gas reservoirs is being studied. Temperatures as high as 400 degrees Fahrenheit and pressures up to 10,000 pounds per square inch are possible with the department equipment. Dr. Lacey describes this work as physical chemistry research done under engineering conditions. Also in progress at the chemical engineering department is research in engineering thermodynamics.

### BEAVER ELEVEN WINS TWO, LOSES TWO

OFF to a good start this season, beating La Verne College 40-0 in a non-league opener, and swamping Occidental 21-7, the Beavers have since slowed down, bowing to Whittier, currently heading the league, 19-7, and also to Redlands, second in league standings, 21-6.

The victory over Oxy, not wholly unexpected after the La Verne encounter, showed the Beavers in control at the Rose Bowl. After an early Occidental touchdown, the Techmen scored in the first, second, and fourth quarters.

The game with Whittier saw the Poets handing the Caltech team their first loss of the season. Looking good, but not quite good enough, the Beavers lost their first half lead of 7-6 early in the third quarter, when Whittier drove 70 yards down the field to their second and deciding touchdown. Whittier's other score came late in the game when a Poet guard fell on a Beaver fumble over the end zone.

Redlands, fresh from a 6-6 tie with Pomona which was reckoned the weakest team in the league, gave the home team a very rough time in the Rose Bowl. The Bulldogs' wide-open playing clicked too frequently and gave them a 14 point lead in the first half. A Beaver drive in the third quarter produced six points, but the game was never in doubt.

On the basis of this last game, the Beavers will start the Pomona game November 16, as underdogs. However, Coaches Mason Anderson and Pete Mehlinger will have the uninjured squad in shape to counter the Sagehens' standbys, the single wingback and short pass over the line with a passing attack, against which Pomona has produced only a weak defense this season.