

wrought Seal, as a token of their veneration." We must pass over the description of the gift, for it would be too elaborate; suffice it to say that amid tasteful carving and emblematic embossing enough, stood these words engraven on a golden belt, and on four sides respectively: "To the German Master; From his Friends in England; 28th August, 1831." The impression was a STAR, encircled with a serpent-of-eternity, and this motto "Ohne Hast, Aber Ohne Rast."

THIS WAS THE LETTER.

"Fifteen English Friends to Goethe, on the 28th August, 1831." [82d Birthday.]

"Sir:—Among the friends whom this so interesting anniversary calls 'round you, may we English Friends, in thought and symbolically, since personally it is impossible, present ourselves, to offer you our affectionate congratulations. We hope you will do us the honor to accept this little birthday gift; which as a true testimony of our feelings, may not be without value.

"We said to ourselves: As it is always the highest duty and pleasure to show reverence to whom reverence is due, and our chief, perhaps our only benefactor, is he who by act and word, instructs us in wisdom,—so we undersigned, feeling towards the Poet Goethe, as the spiritually taught towards their spiritual teacher, are desirous to express that sentiment openly and in common. For which end we have determined to solicit his acceptance of a small English gift, proceeding from us equally, on his approaching birthday; that so, while the venerable man still dwells among us, some memorial of the gratitude we owe him, may not be wanting.

"And thus our little tribute, perhaps among the purest that man could offer to man, now stands in visible shape, and begs to be received. May it be welcome and speak permanently of a most close relation, though wide seas flow between the parties.

"We pray that many years may be added to a life so glorious—that all happiness may be yours, and strength given to complete your high task, even as it has hitherto proceeded 'like a star, without haste, yet without rest.' "We remain sir, your friend and servants,"

FIFTEEN ENGLISH FRIENDS,
Who were the following:

- Thomas Carlyle, "a writer of books."
- Dr. Carlyle, Translator of Dante.
- W. Fraser, Editor of The Foreign Review.
- Dr. Maginn, Editor and Author.
- Heraud, Editor of Fraser.
- G. Moir, Translator of Wallenstein.
- Churchill, Translator of Wallenstein's Lager.
- Jerdan, Editor of the Literary Gazette.
- Prof. Wilson, Editor of Blackwood.
- J. G. Lockhart, Editor of the Quarterly.
- Lord Francis Levison Gower, Translator

of Faust,
Sir Walter Scott, } Poets.
R. Southey,
W. Wordsworth,
B. W. Proctor, Barry Cornwall.

So given in 6th part of Zelter's Correspondence with Goethe (Berlin 1834.)

GOETHE'S GRACEFUL REPLY WAS THIS:

Worte, die der Dichter spricht,
Treu in heimischen Bezirken,
Wirken gleich, doch weiss er nicht
Ob sie, in die Ferne wirken.

Britten, habt sie aufgefasst!
"Thätigen Sinn! das Thun gezügelt:
Stetig Streben, ohne Hast!"
Und so wollt Ihr es besiegelt!

Words which the poet spoke
True—in the homely circle,
Work also, though he knows not
If they work, in the distance far.

Brittons have them understood!
"Active thought! has action guided—
Steadfast striving, without haste!"
And, as you wish, be it sealed.

Then he impressed the Seal they had sent. T. B. W.

Current Science.

AERIAL NAVIGATION.

A German general, Count Von Zeppelin, has at last solved the problem of aerial navigation. After years of toil and study, not without failures, he has launched into the realms of air a peculiar craft which obeys his will by simple manipulation.

This strange invention is a veritable cigar-shaped balloon, 415 feet long and 40 feet in diameter. It is constructed of 24 aluminum bands and divided into 17 compartments, each one being an independent balloon. These compartments are capable of containing 11,000 cubic feet of hydrogen gas, without appreciable loss in many weeks. From the outside of the balloon hang aluminum wires and hempen cords, to which are attached two boats of light material, and connected by a foot bridge. Each carries a 15-horsepower gasoline engine, capable of driving the propeller at the rate of 1,200 revolutions a minute. A speed of about 15 miles is anticipated. This craft was lately tested over Lake Constance with favorable results.

PHOTOGRAPHING THROUGH THE HUMAN BODY.

Dr. J. W. Kime, of Fort Dodge, Iowa, has lately demonstrated that the actinic rays of the sun may be made to pass through the human body and produce photographic prints. The method of procedure is as follows: The subject is taken into a dark room and a sensitized plate placed in contact with a negative is securely fastened to his back and all covered over with dark wrappings, so as to exclude all light. The subject is then stood before a reflector, so constructed that all light which falls upon it is focused upon a spot six inches in diameter. Actinic or chemic rays being more abundant in the

violet or ultra-violet bands, these are utilized and a greater percentage of them are thus obtained in proportion to other rays, if only white light were used.

Upon removal of the plates it has been found that a duplicate is printed on the sensitized plate after an exposure of five minutes. It has been demonstrated that these rays pass through bone very readily, through muscles with less facility, and through integuments with greater resistance still. The medicinal properties of these rays may thus be extended to the internal body as well as the skin.

THE LAST SIGN OF LIFE.

If an electric current be applied to living matter, a secondary current is formed, following in the wake of the applied current, but if the body is dead, no secondary current is formed, or else a contrary current due to polarization is noticed. Mr. A. Waller says that this positive electric re-action proves that the body experimented upon is not dead. It is their last sign of life and is characteristic of all organic bodies. The method of procedure is as follows: The subject is connected to a galvanometer and its own current compensated for so that the switch may be opened and closed without causing the needle to move. The switch being in place, a current is sent through the subject and immediately the switch of the exciting current is closed and the switch of the galvanometer opened.

The experiment is repeated by sending the current in the opposite direction. This demonstrates whether or not there is a responsive current in the subject. If a secondary current is noticed in either direction, the object is living; if none, the object is dead.

Aid for Both Funds.

Editor Torch of Reason.

Enclosed you will find five dollars, which I donate to the building fund of the Liberal University of Silverton, Oregon. I am a subscriber to your paper, The Torch of Reason, and I am very much pleased with it. I am sure that you are doing a grand and noble work and I wish you all the success possible. The next subscription I want to make is toward the Ingersoll Chair, which I expect will be some time next month.

HENRY C. WILLISS,
Washington, D. C.

Coming to Silverton.

Pres. J. E. Hosmer, Liberal University, Silverton, Oregon:

My dear Professor:—Your favor of the 11th inst. at hand and contents noted. It seems to me that the Liberals of the Western

world ought to be able to support royally, at least one genuine Free-thought University, and I believe they will. I believe your school will not need for funds when its nature and purpose is fully and widely known. I am going to try to do my part. I shall endeavor to arrange my business interests here so as to enable me to come to Silverton about the 1st of January, 1901. We can then take up the work together.

Always yours,
S. H. VAN TRUMP.
Lawson, Missouri.

The above letter is considered very good news by the L. U. O. workers. Prof. Van Trump is a trump for us indeed, as he is a professional biologist and horticulturist. We need just such a man as we believe him to be, and especially as he is willing to sacrifice on the altar of the new religion of Science and Humanity. His letter shows that he is made of the right kind of Free thought timber and has the right kind of faith.

We give the Torch of Reason and the Weekly Oregonian both one year for only \$1.75. If you want to take advantage of this you must order soon for we may discontinue the offer at any time.

Secularists would you not like to have some letterheads printed with Secular sentiment and Wettstein's Free thought badge, to use in correspondence with your friends? We will furnish them to you with your name and address printed on them for 75 cents per hundred, \$1.50 per 250, or \$2.50 for 500, postpaid. Let the people know where you stand.

Cats Knocked Out!

Watch-Cats generally undersell the stores, but since I am giving my entire attention to mail orders, I have facilities to undersell the best Catalogue Houses.

Compare Carefull with Latest 1901 Catalogues.

Best American watches, 18 size in 2, 3 or 4 ounce Silverine screw cases; "Trenton," "Standard" or "Century," 7 Jewels, \$3.50. Hampden, \$4.50; Elgin or Waltham, \$5; Rockford 11 Jewels, \$5.50; 15 Jewels, \$6.50; 17 Jewels adjusted, \$9. Same, Hamden, \$10. Same Elgin or Waltham, \$11. Fine full adjusted, 17 Jewels, nickel, "Appleton, Tracy & Co." \$16.50; "Bunn" \$17; "Otto Wettstein," "New Railway," "B. W. Raymond," \$19. 21 Jewels, extra fine throughout; "John Hancock," \$20; "Bunn Special," \$22.50; "Crescent Str." \$22; "Otto Wettstein Special," "Vanguard," "Special Railway," or Elgin 149, 150 or 181, \$25. "Special Railway," 23 Jewels, or "Bunn Special," 24 Jewels, \$28.50.

The above in 4-ounce Silver case, \$4.50 extra; in 20-year gold filled, open face, \$4 extra; 25 year, \$6.50 extra; 20-year hunting case, \$6.50 extra, or in 25-year hunting case, \$8.50 extra.

All gold filled cases are artistic hand chased, accompanied by Mr.'s guarantee and watches kept in order for one year.

Other styles and solid gold equally as reasonable. Correspond with me for anything in the Jeweler's Line and save money. Orders filled from any catalogue at prices quoted or less. Save this price-list. I pay freight.

OTTO WETTSTEIN.
Rochelle, Ill.