

U. OF C. SAVANT
CLEARS UP
HAS SOLVED

Professor Campbell Gives
New Magnitude to Uni-
verse of Suns and Stars
in Discoveries

LICK OBSERVATORY
IS SCENE OF WORK

Solar System Containing
Earth 50 Per Cent Greater
Than Was Supposed

BERKELEY, Jan. 19.—A new concep-
tion of the magnitude of the universe
of suns and stars is revealed by a
series of brilliant astronomical discov-
eries achieved at Lick observatory by
Director William Wallace Campbell,
and announced officially from the Uni-
versity of California.

Doctor Campbell has upset many ac-
cepted ideas of the structure and di-
mensions of solar systems, and has
made antiquated in greater or less de-
gree all the standard and popular pub-
lications in astral science.

He has discovered the true nature
of the North star; he has extended by
millions of miles the supposed limits or
extent of our own solar system; he
has proved the age of our sun, and
found it young, slow moving and con-
sequently constantly changing its rela-
tive position to other suns; he has com-
puted the number of unknown nebulae,
and he has discovered unexpectedly the
mechanical law of nebular motion.

NEW FACTS ACHIEVED

In detail, he has achieved the follow-
ing new facts:

- First—The solar system containing the earth is 50 per cent greater in scale than astronomers previously had supposed.
- Second—Our sun, one of the youngest in the universe, is shifting northward through space, carrying its satellites, at the comparatively slow rate of 12 miles a second. Other luminaries in the same spectral class keep moving northward at a rate of 18 miles a second on the average. These facts prove that the solar systems set in a changing their positions relative to each other.
- Third—The North star, notable for its brightness and apparent fixity of position, really is not a star, but is a complete system of three suns, which revolve about a common center of gravity. The tremendous distance from the earth caused the apparent fusion into one star, and the apparent steadfastness of the star. The nearest star, Capella, is a binary, consisting of two separate suns nearly equal in luminosity, which revolve about their common center of mass every 104 days.
- Fourth—Though only 15,000 nebulae have been observed, there are several hundred thousand nebulae in the sky, all of which will be seen by telescope or photographed when astronomers have an opportunity of beginning this task.
- Fifth—Nearly all nebulae in form, a hitherto unknown fact, which establishes that nebulae rotate.

NEBULAR ROTATION SURPRISING

Doctor Campbell's discovery of the rotation of nebulae is described at the University of California as "wholly unexpected." His estimation of the number of nebulae was accomplished by mathematical process, based on observations of known nebulae. Subsequent observations have verified the accuracy of the computation.

His discovery of the relative age and speed of our sun follows closely and is consequent to another discovery by Doctor Campbell, which European scientists have called one of the greatest of contributions to cosmology. This was his proof that the youngest stars have slowest velocity; that the velocity increases with age, and that the age of astral bodies may be determined by ascertainment of their velocity. By application of this law of acceleration Doctor Campbell was able to establish that our sun is one of the youngest, rather than one of the oldest, in the heavens.

His other discovery—of the astounding number of double stars or binaries—led to his prediction that during this century nearly every other star would be found to be double. In investigation of this problem came the discovery that the North star was composed of three separate suns. Astronomers had known in recent years that Polaris, or the North star, consisted of two suns; it remained for Lick observatory again to prove them wrong, and to show by spectrographs that there are three component suns in the North star.

DEFINITE LINE OF INQUIRY

With these discoveries of hastening of pace of suns; of the mechanical motion and vast number of nebulae; of the multitude of double stars; of the sidereal universe, the astronomers at Lick under Doctor Campbell's direction, are pursuing a definite line of inquiry to ascertain the actual origin, evolution and future of the heavenly bodies. Toward this end, separate investigations are being made of each of these problems.

STEEL 'TRUST' LIKELY TO THWART PROSECUTION

Mammoth Corporation Probably Will Make the Dissolution Proceedings Unnecessary

(Special Dispatch to the Call)

PITTSBURG, Jan. 19.—The United States Steel corporation, according to authentic reports here, will voluntarily segregate its subsidiaries and make unnecessary the government prosecutions started under the Sherman act. This reported dissolution plan is said to have been discussed at a meeting of the officials of the steel corporation in New York City.

President Binley and Vice President Pope of the Carnegie company have been in New York all week. They are the only officials authorized to speak for the steel corporation in Pittsburgh.

The proposed wage advance was the only feature of the New York meeting given wide publicity, although the segregation project is said to have been actually the biggest question before the conference.

It is said the recent utterances of Governor Wilson relative to "great combinations" and his intimation that men in big business must adopt a new code of ethics have made it plain that the Democratic president will not be more lenient toward the trusts than was Roosevelt or Taft.

The principal cause for fear is said to be that the government if it carries through the steel corporation prosecutions will be more drastic than with the Standard Oil and the Tobacco trust. In these cases the government simply proved unlawful combinations in restraint of trade. The separation of the companies in these trusts was a formality. The belief of the steel corporation directors is said to be that the government intends to do a better job of trust busting with the steel corporation and if this prosecution is carried through there will be another and more pronounced method of company separation than that which was enforced in the Standard and Tobacco cases.

The high cost of living==the cost of living high ==or the cost of living at all==are solved by saving labels from products Made in California

INCREASING DEMAND FOR CALIFORNIA PRODUCTS

C. H. Workman and Others Attribute It to Call's Home Industry Campaign

That The Call's campaign for more California factories has resulted in an unprecedented demand for articles made in California was the tribute that C. H. Workman, director of the Home Industry League, paid to The Call's label page in an address delivered before a hundred manufacturers in the Palace hotel last Thursday.

"Grocery stores particularly," he said, "are bestirring themselves to stock home product goods. I am called on the telephone many times every day for information on the subject. When I ask the reason for their interest in California made goods the answer is always that there is an insistent demand for the California label."

"The Call is doing a splendid work," said J. C. McDonough of the Mutual Biscuit company, "and the people are entering into the spirit of the boosting campaign. The cry for more California factories and for greater factories is founded on common sense. It is also meeting with success, because it gives a fair reward to everybody that takes part in the campaign, be his efforts small or great."

GROCERS REPORT DEMAND

Other officers of the Home Industry league announced that a very general demand for California made goods by consumers was reported by the grocers, hardware dealers and other retail lines directly affected by The Call's label page. Representatives of brands advertised in The Call verified the reports. They declared that there had been a noticeable increase in demand for their goods, traceable directly to The Call's label gathering campaign.

On the other hand The Call label department was ready to vouch for the statements with such concrete evidence as stacks of certified labels turned in by hundreds of enthusiastic label collectors. The Call has sought to keep in touch with conditions in every section of the bay counties with regard to the label gathering campaign. Certain inquiries have been made, and these indicate that in the majority of instances the weekly page is retained and consulted in the making of purchases.

On Thursday a young man dressed in the height of fashion approached the label department for information regarding the method of getting credits on a surety bond. He said he was about to pay \$50 for a surety from a concern advertised in The Call and weekly certificates redeemable in The Call premiums. The method of obtaining the credits for expenditures of this kind, where there is no label to be presented, is to bring the document, order or cash tag to the label department and have the certificates issued.

FACTORIES BEHIND CALL

Every manufacturer advertising on this page will redeem The Call certificates with his own goods if the person having the labels so does next. The factory bears are behind The Call in this

AID OF WOMEN'S CLUBS SOUGHT

Directors of League Advertising Cause by Addresses In All Parts of State

The Call's campaign to boost the products of California factories is being given wide publicity among the women's clubs. In addition to Miss Mae B. Wilkin, special appointee of the Home Industry league, who is enrolling thousands of women workers in the cause of home industry, the directors of the league are calling attention to The Call's campaign in addresses delivered in all parts of the state.

Dr. C. V. Cross and W. Laurence, directors of the league, spoke to several hundred people last Thursday evening at the Green Valley Improvement club. They discussed the advantages of encouraging the local factories by buying their products and explained The Call's label gathering plan. Doctor Cross urged the men and women to enter the campaign.

"The Call proposes to make it worth your while," he said, "for you to give preference to goods made in California, when the considerations of price and quality are equal. This inducement is held forth as a stimulus to the buying public and not because the goods are in need of any attractions other than their own merit."

The unfortunate feature with our home market is that there exists a widespread indifference as to the origin of articles purchased. A man or woman enters a store and calls for a flour, a biscuit, or a baking powder without specifying any brand, and invariably takes what is selected by the clerk. The Call seeks to put an end to this lax method of shopping by having consumers call for the brands that are made in California.

MASONS INSTALL NEW OFFICERS

(Special Dispatch to the Call)
PALO ALTO, Jan. 19.—Palo Alto lodge No. 348, F. and A. M., has installed officers for the year as follows: James W. Wells, worshipful master; Claude S. Downing, senior warden; Edward C. Tholts, junior warden; John P. Byrbee, treasurer; William C. Werry, secretary; George W. Harms, chaplain; Clement E. Jordan, senior deacon; Ralph W. Folmer, junior deacon; William B. Allen, marshal; Harry N. Vandervoort, steward; Otto A. Wideman, steward; George C. Ingelow, organist; and Richard Werry, tyler.

campaign and have declared that they will do everything possible to stimulate interest in the campaign and reward those that take part. There have been a great many participants who have used their certificates for purchasing food supplies of The Call advertised brands, but the great mass of label gatherers seem to be after the premiums and bonuses.

LIST OF PREMIUMS

(Premiums Made in California When Possible)

- | | | |
|------------------|--------------------|----------------------|
| 10 CERTIFICATES | Chafing Dish Fork | Baking Sheet (Men's) |
| 20 CERTIFICATES | Cold Cream | Punching Bag |
| 30 CERTIFICATES | Chafing Dish Spoon | Bracelet |
| 40 CERTIFICATES | Manicure Set | Spoon Tray |
| 50 CERTIFICATES | Shaving Stick | Shower Tray |
| 60 CERTIFICATES | Base Balls | Roller Skates |
| 70 CERTIFICATES | Base Balls | Automatic Safety |
| 80 CERTIFICATES | Base Balls | Shower Tray |
| 90 CERTIFICATES | Base Balls | Umbrella |
| 100 CERTIFICATES | Base Balls | Handed Nappy |
| 110 CERTIFICATES | Base Balls | Military Brushes |
| 120 CERTIFICATES | Base Balls | Umbrella |
| 130 CERTIFICATES | Base Balls | Umbrella |
| 140 CERTIFICATES | Base Balls | Umbrella |
| 150 CERTIFICATES | Base Balls | Umbrella |
| 160 CERTIFICATES | Base Balls | Umbrella |
| 170 CERTIFICATES | Base Balls | Umbrella |
| 180 CERTIFICATES | Base Balls | Umbrella |
| 190 CERTIFICATES | Base Balls | Umbrella |
| 200 CERTIFICATES | Base Balls | Umbrella |
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| 460 CERTIFICATES | Base Balls | Umbrella |
| 470 CERTIFICATES | Base Balls | Umbrella |
| 480 CERTIFICATES | Base Balls | Umbrella |
| 490 CERTIFICATES | Base Balls | Umbrella |
| 500 CERTIFICATES | Base Balls | Umbrella |

TESTS RESULT IN WATER BEING BRANDED NATURAL

United States Government Pays High Compliment to Qualities of Veronica

A high compliment was paid to the medicinal qualities of Veronica water by the United States government when, by special ruling through the interstate commerce commission, all waters other than those from the Santa Barbara springs were stopped from representations of certain medicinal qualities.

It was further announced that Veronica water possessed curative properties that were unequalled by any water known. Chemical tests demonstrated a complexity of minerals and ingredients highly necessary to the human organism. The government practically branded it as the only strictly natural medicinal water produced.

Santa Barbara county supplies nearly one-tenth of the medicinal waters of the state, whose total annual production is 2,230,000 gallons. The Veronica springs are near the Hope ranch in Santa Barbara county. Their great curative properties were known by the Indians many centuries ago and were made much of by the Franciscan fathers in the time of Spanish occupation. The water is bottled up as it comes bubbling from nature's medicine box, and thus retains the health giving qualities with which it is charged.

When You Sweep
Indispensable for sanitary dustless sweeping. Makes house cleaning a pleasure. Ask your grocer today. 20 and 50c cans for the best carpet sweeper. \$1.50, \$2.00 and \$5.00 barrels for the floors. It cleans, protects and disinfects. Cedar-Sweep Co., 715-17 Brannan St., San Francisco. Howard E. Parker, Sales Manager.

PACIFIC COMPANY
Liability Automobile Plate Glass Burglary Fire Accidents Health Compensation
C. H. CRAWFORD, Pres.
Place Your Business With Your Own Home Company

MUTUAL BISCUIT CO.
ENJOY MUTUAL CALIFORNIA LUNCH CRACKERS
Eggs, Raisins, Apples, this is California's best Cracker.
SAN FRANCISCO

A Perfect Shortening
Pies Cakes Pastry Doughnuts Mayonnaise
U. S. Gov't Insp'd

THE STANDARD SOAP CO.
Use this splendid Pure White Borax Soap for Washing Clothes and Dishes.
San Francisco.

MORRISON'S CERO
NOT COFFEE

NOXFAT
DOES JUST THAT!
It will remove surface dirt wherever applied.
E. C. Alexander's Reducing Cure
A purely hygienic preparation for reducing FAT on any part of the body.
Guaranteed by E. C. Alexander under the food and drug act June 30, 1906.
The NOXFAT CO. (E. C. Alexander), 150 Franklin St., San Francisco, Phone Park 4286.

THE CALIFORNIA BLEND
GOLD ONLY IN THIS CALL'S
Coffee
GEO. W. CASWELL CO.

Note—THE CALL'S label gathering campaign is open to all persons and the premiums will be paid promptly on presentation of CERTIFICATES.

Rules for The Call's Label Gathering Campaign

- Rule 1—Labels must be of goods advertised on this page, must have their cost price marked on the margin, and must be presented at THE CALL'S label department Saturday afternoons, only.
- Rule 2—Labels representing \$1.00 worth of purchases will entitle their owners to one CERTIFICATE, \$10.00 worth ten CERTIFICATES, etc. Certificates are redeemable by THE CALL in premiums—see list.
- Rule 3—Labels must be gathered in the process of legitimate consumption among families. This rule will be strictly interpreted. Labels coming from improper sources, such as manufacturers, printers, etc., will not be accepted. This measure is taken for the protection of all participants.

EXTRA TALLIES.
The value of each label can be increased 20 per cent if it is accompanied by its ad clipped from this page. So keep THE CALL'S label page and clip the ads.

RULES FOR AWARDING BONUSES

- (The bonus prizes comprise a motorcycle, gold watch, \$50 in gold, etc.)
- Rule A—All persons desiring to try for bonus prizes must enter their names with THE CALL, so that the standing of contestants may be published. Contest for bonus honors will cover a three-year period.
- Rule B—Contestants will be credited with all CERTIFICATES cashed in for premiums except when no increase in their standing has been shown for three months—they must then begin anew.
- Rule C—Contestants may enter their names and begin working for bonus prizes at any time.

DRINK CERO
It's better than coffee and far superior to any other coffee substitute advertised.
Cero is a delightful beverage of pleasing taste and when prepared as coffee can hardly be detected from a blend of Mocha and Java. Every package guaranteed absolutely pure. Ask your grocer for MORRISON'S CERO.

IMPERIAL Liquid Glue
IMPERIAL GLUE CO. SAN FRANCISCO

VERONICA WATER
FOR Headaches and Constipation TO PROVE
It is far the superior of any foreign water. We will put a case in your home on trial plan.
VERONICA WATER CO. 2125 Market St.

ROSE BUD Cream Wheat
is a baked wheat manufactured from the cream of the California wheat and guaranteed by H. GOULD COMPANY.
SOLD BY GROCERS
CREAM WHEAT 10c pkg. 3 for 35c

Del Monte BRAND
Canned Fruits, Vegetables, Catsup, Preserves, Honey, Asparagus, Etc.

BORADENT TOOTH PASTE
BEST FOR YOUR TEETH

WATER-WATER-IRRIGATION-IRRIGATION
DON'T WORRY about a dry season. Insure against it by boring wells, thereby securing a beautiful supply of pure water. GET THE BEST
WELL CASING
Manufactured by W. W. MONTAGUE & CO. Established 1858. Pioneer manufacturers in this line. SAN FRANCISCO.

START THE DAY RIGHT!
Drive the Glooms Away With a Steaming Cup of
MO-KO-NO NOT COFFEE
Served at Boos Bros. F. Cafeteria

THE CALIFORNIA BLEND
GOLD ONLY IN THIS CALL'S
Coffee
GEO. W. CASWELL CO.

XL TAMALES ENCHILADAS CHILI CON CARNE PORK & BEANS CONDENSED SOUPS HOME PRODUCTS
Save I X L Labels

BOOTH'S CRESCENT BRAND SARDINES
The Sardine that is distinguished from all by its superior food value and flavor. A Pound Can 20c Everywhere.
A Home Product of the Highest Merit Packed in the Famous Bay of Monterey

QUEEN LILY SOAP CLOVER LEAF BORAX SOAP KLEENO WASHING POWDER

Photo Finishing AT CUT RATES
BEST WORK LOWEST PRICES PROMPT SERVICE
"WHY NOT LET US DO IT?"
Sunset Photo Supply Co., Inc. 520 MARKET ST. Next to Fifth

"Pearson" Nails
(Cement Coated)
MAKE BETTER BOXES COST LESS—MOST ECONOMICAL Used by California manufacturers
A. C. RULOFSON CO. 315 MONADNOCK BLDG., San Francisco, California

THE CALIFORNIA BLEND
GOLD ONLY IN THIS CALL'S
Coffee
GEO. W. CASWELL CO.

Save I X L Labels
MO-KO-NO NOT COFFEE
More Delicious Than Best Coffee
Composed of California's Best Grain and Fruits. No Adulterants.
If you have not tried MO-KO-NO you have missed the best cereal drink.
MO-KO-NO PURE FOOD CO. San Jose, California Served at Boos Bros. S. F. Cafeteria

Label Designing and Label Printing
Beautiful Two-Tone and Multi-Color effects by Label Experts. Estimates promptly and cheerfully given.
Address "CHIC DESIGNS" Care Call, "Made in California Depot"

Snowdrift Starch
MAKES PERFECT CAKES
A new California product that should find a welcome in every kitchen. Perfectly pure and especially prepared to produce "Feather Flakes" in fancy cakes.
ASK YOUR GROCER

THE CALIFORNIA BLEND
GOLD ONLY IN THIS CALL'S
Coffee
GEO. W. CASWELL CO.

XL TAMALES ENCHILADAS CHILI CON CARNE PORK & BEANS CONDENSED SOUPS HOME PRODUCTS
Save I X L Labels

THE CALIFORNIA BLEND
GOLD ONLY IN THIS CALL'S
Coffee
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Watch for New Home Industry Page Next Week