

SOME FREAKS OF NATURE
Paradox of Moving Machinery is Explained and Made Plain.
SHIPS FASTER THAN WIND.

Houses May Be Heated by An Ice Furnace and Water Made Serviceable as a Fuel.

A gentleman named Hammon has got out a book which he calls "Paradoxes of Nature and Science." Mr. Hammon is entitled to add to his name the impressive abbreviations M. O. Oken, L. A. Land. He was formerly professor of Trinity College, Oxford, lecturer under the London County Council, at University College, London, 1906-7, and is the author of "Radiation Explained." This last book of his contains pearls of scientific wisdom in a setting of entertaining anomaly. Paradoxes he may well name them. Everything which happens to contradict scientific principle or settled belief, Mr. Hammon sets forth with easy explanation of the why and the wherefore of these interesting contradictions, says the Boston Transcript.

For example, when a train is going at the rate of 60 miles an hour, what part of it is moving backward? This is no trick, no "sell." The whole train is not going backward, and you are not the innocent goat to be sacrificed upon its rails. The train is going forward at the rate of 60 miles an hour, and yet a portion of that same train is going in a contrary direction at a pretty fair rate of speed. It is not going relatively, even; it is actually and literally in a hurry in that direction. You may prove this for yourself with a bicycle. Push its front wheel up against a house wall. Make a chalk mark on the lower part of the wheel and on the ground immediately beneath it. Back the machine a little from the wall, and when the wheel has moved an inch the marked spot will not appear to have moved at all. As the machine is slowly backed farther the first visible movement of the bottom of the wheel is upward from the ground, while it is impossible to see that the marked spot has backed from the wall to the smallest extent. This means that all wheels, traveling at any speed, have a part—the part in immediate contact with the ground—which has no movement at all.

THE PARADOX EXPLAINED.
But the wheel of a railroad car has a flange, a portion which just down below the wheel's point of contact on the rail. That point of contact then becomes a center; the whole wheel passes forward above it, while the flange beneath it passes under it, going backward. That is the part of the wheel that travels in the contrary direction. And by a simple mathematical formula its rate of speed is calculable at about one-third the speed of the axle of the wheel, which represents the forward rate of travel. So that on every express train going at 60 miles an hour toward New York there is a portion of it traveling toward Boston at 20 miles an hour.

The paradox that sail and ice boats may fly faster than the wind which propels them is obvious and common-place to the sailor, but it is not so to the average billiard ball. Place three balls in a row along the cushion, touching each other. Place another ball alongside the cushion, so that it is in line with this row. Hit this lightly and smoothly, so that it strikes the row. It will come to rest at once on striking the nearest ball to it, and the next one to it will also remain stationary. But the third ball will start off from the bunch at precisely the speed of the ball you have struck, and it will quit the cushion off to the exact distance from the row that you had placed the ball which you struck. The balls will then be in a position exactly the reverse of the one at which you started. The ball you struck with your cue will be the third ball in the row, and the last ball in the original row will be at rest just eight inches away from them. If you had placed the balls eight inches from your row of three, and hit them with your cue, so that they struck the row of three, then two balls would leave the row, and the cue ball would retire to the eight-inch position occupied by your two cue balls. Plainly the billiard ball is smart enough to come in out of the rain. It can count and add and subtract. It probably has its opinion of the people who bat it about the cushion, with not nearly so true an instinct for angles and velocities as it has itself.

ICE USED FOR HEAT.
Hereafter, when coal is high we may heat our homes with ice. For ice gives out heat—more than much. It would take a large chunk to heat the public library, but it might be done. Everything in nature has some heat, every known object, even ice. Ice is cold to us only because it has much less heat than our bodies. It hasn't much heat, to be sure, but still a little. You may lower its melting point by mixing in some salt. A mixture of water and salt requires 22 degrees of frost to freeze it; therefore, the mixture of ice and salt can be melted by the heat of anything that has a higher temperature than that. Such a thing as pure ice has been exposed for some time to the air; it remains at freezing, or melting, point, 32 degrees Fahrenheit, or zero, on the centigrade scale. At this temperature, then, it has heat enough to melt a portion of its own substance that has been more easily melted by the addition of salt. It provides a melting point for the pure ice, and melts a part of itself, devoting a part of its heat energy to this work. That is to say, that, having used up some of its heat, it has less heat left. And that is further to say that all the while the ice was melting it was growing colder.

We come now to the ice furnace. A large mass of pure ice is contained in a galvanized receptacle having a lead lining from the top. About this receptacle is placed ice mixed with salt. The salted ice melts. In melting it draws from the pure ice its heat. Our patent ice conducts this part of all parts of the house. And there is a great saving in coal.

Water may be made serviceable as a fuel. It is no more rhetorical hyperbole to say that the water which the fireman turned upon a fire rather added to the intensity of the conflagration. The heat of the flames instantly disintegrated the water, and converting it into its constituent gases, burned them. Let only some inventive genius set himself to work and apply this principle to the kitchen range, and he shall have fame and fortune, and we a cheap and handy substitute for anthracite at \$1 a ton.

The sandest of eyes has its blind spot. Anybody can find his own after a short search. On a plain piece of paper place the capital letters H and L, some five inches apart, like this:

column, but of a sizable medium some-where between.

Now close your left eye, holding it tight with your hand if necessary. Then hold the paper off say eighteen inches from the open right eye. Look only at the letter H. But "out of the corner of your eye," as we say, you will catch a glimpse of the letter L. Now slowly move the paper closer to the eye, keeping that eye fixed on the H all the while. When the paper is about six inches from the eye the L will disappear. You have ceased to see it out of the corner. That is, you have apparently ceased to see it. Move the paper still closer to your eye, and the L will reappear! It has simply passed the blind spot in your organ of vision.

We hear a great deal about the heart-string—those famous heart-strings which the theater press agents promise

us shall be played upon by his drama. You sit in your seat before the play, turning the leaves of your program, and you hit upon the announcement of the next attraction. It is sure to say that this powerful attraction will reach the heart-strings. Now most of us have held those heart-strings to be but a figure of speech. Poor lay fools that we are, we know not that they have a place in physiology and a very large part in everyday life. The heart without heart-strings doesn't work, that's all.

We all know that between the auricle and ventricle are valves. But those wonderful automatic valves are not stout enough in their own tissue to hold back the pressure that the heart imparts to the flow of blood at each of its beats. And nature, with her wonderful provision for everything, has fitted to those valves complete sets of

tiny guy wires which stiffen them to their work. Of course, they are not of wire; they are tendons, but they do very well, considering the double duty they perform. Go to the Broadway Square and learn for yourself the extent they are called upon to perform. Truly, harmonious nature has her capricious moments and dearly loves a feat, a paradox, a bit of sport.

Napoleon Bonaparte showed, at the battle of Austerlitz, he was the greatest leader in the world. A quick cure for rheumatism, Sprains, Burns, Cuts, etc., A. C. Pitts, Redwood, La., says: "I use Ballard's Snow Liniment in my family and find it unexcelled for sore chest, headache, corns; in fact, for anything that can be reached by a liniment." Sold by Z. C. M. L. Drug Dept., 12 and 14 South Main St.

THE SKYSCRAPER MENACE.
Does It Threaten a Greater Disaster Than San Francisco's?

A catastrophe that will eclipse the destruction of San Francisco is the cheering prospect offered for the contemplation of New York by the president of the board of fire underwriters. And it is not New York alone that is threatened, but every great city that permits the construction of skyscrapers. The underwriters think that there is not only a possibility but a very strong probability of a black starting in the top stories of a nest of these aerial hives and leaping across the canyons that separate them, raging aloft like a fire in the upper branches of a forest, and sweeping unchecked out of reach of the helpless firemen in the street. When office buildings go higher than the Washington Monument all the ordinary methods of protection become obsolete. No hose can carry a stream half way to their roofs. No street mains can furnish pressure enough to send water up in stand-pipes. Of course there are satisfactory methods of supplying the upper floors in ordinary three or four story buildings, but they would count for nothing in a conflagration. The experience of San Francisco has shown in the opinion of President Habb, that "so-called fireproof" buildings can not withstand the attack of a wave of flame. If a fire should sweep the financial district of New York it would cause a loss of from \$1,000,000,000 to \$2,000,000,000; the insurance companies would be hard pressed to pay 20 or 25 cents on the dollar, title guaranty companies, mortgage com-

panies, savings banks and all other financial institutions would suffer, and the city would feel at once the loss of revenue from the destruction of taxable values.

Another menace that hangs over the skyscraper district of great cities is the danger of panic. It is said that if a sudden shock should send the swarming cliff-dwellers all surging to the streets at once the highways would not hold the human flood. The streets of our older cities were designed to meet buildings three or four stories high. When in such buildings are piled one on top of another, and the same thoroughfares are expected to accommodate the people from all of them, the results are likely to be startling.

Dog collars, from 25c. Z. C. M. L. hardware dept.

ALL OVER OUR STORE WONDERFUL VALUES AROUND!

The Values Next Week are so Extraordinary, we can easily count on next week's Sales exceeding the Greatest Days in the History of Our Store. Don't miss a single detail of this ad.—You'll be Intensely interested. We never made an Announcement that carried Greater Buying news.

MONDAY
For one day only!
\$4.50 WHITE IRISH POINT CURTAINS!
\$4.50 White BATTENBERG CURTAINS!
and
\$4.50 WHITE CLUNY CURTAINS
Monday, per pair.....**\$2.89**

MONDAY
For one day only!
\$1.25 and \$1.50 Lunch Cloths
Among them scalloped white Linen Damask Lunch Cloths with one row of drawn work designs, 30 inch size, either round or square. Homesteaded white Damask Lunch Cloths, with drawn work designs, size 30x30, and 35 inches square hem-stitched plain linen squares, Monday each—**78c**

ESTABLISHED 1864
T. Auerbach & Bro.
ONE PRICE TO ALL NEVER UNDERSOLD

MONDAY
SPECIAL
Stockings
For Children
20c value for 12c
Narrow ribbed heavy fleeced, seamless stockings in all sizes, excellent fast black quality for boys and girls' school wear, best 20c value, on sale at—**12c**

MONDAY
SPECIAL
Vests and Pants for Ladies
Best 50c grade.....**43c**
Ladies natural grey or white fine cashmere ribbed fleeced underwear in a fine, excellent finish, quality, all sizes, regular 50c grade, on sale at.....**43c**

MONDAY!
FOR ONE DAY ONLY.
\$3.50 and \$4.00 Satine Covered COMFORTERS
Hand Knotted in Choice flowered patterns and colorings, filled with the best white carded cotton, Monday, each—**\$2.68**

The Right Kind of Silks and Dress Goods at very Low Prices!
The Newest of the New in the Various Lines of Silks and Dress Goods at Prices Certain to Please the most Critical

ATTRACTIVE OFFERING OF Women's Most Fashionable Suits, Coats, Skirts and Waists

MONDAY!
SPECIAL
Heavy Quality Knitted SKIRT
Best 75c value for 39c
Heavy knitted Underskirts in gray, pink or red, with an extra good quality that retails regularly for 75c. Sale price, **39c**

MONDAY!
SPECIAL
Outing Flannel GOWNS
Best 90c grade for 63c
Ladies' extra good quality outing flannel gowns in pink or blue stripes, all sizes, cut full length and with and without finished, 90c grade on sale at—**63c**

MONDAY!
FOR ONE DAY ONLY.
\$4.00 White Marseilles
Bed Spreads
Pringed on all sides, with cut corners—elaborate designs—Monday each—**\$2.88**

Fancy Crepe De Chene Silks
Fancy Crepe de Chene, 20 inches wide, white ground flowered designs in colors Heliotrope, Pink and Blue, suitable for gowns, waists and scarfs, regular value \$1.25. Sale price.....**79c**
Fancy Brocaded Crepe de Chene, 20 inches wide, suitable for Waists, Gowns and Scarfs, regular value \$1.25. Sale price.....**79c**

40c Value Suitings for 23c a yd.
25 pieces New Check Suitings with very neat embroidered dot effects, comes in all colors, worth regular 40c a yard—**Special at 23c a Yard**
45c Value Cashmere for 33c a yd
30 inch fine silk finish Cashmere, comes in all colors including cream and black, **Special at 33c a Yard**
40c Value Scotch Plaids, 29c a yd
50 pieces, new assortment all bright colors, new style plaids, worth regular 40c—**Special at 29c a Yard**
75c Value Novelty Suitings, 55c a yd
50 pieces, 38 to 40 inch New Stripe Check and plaid Novelty come in an endless variety of color effects, very stylish for Waists, Skirts or Complete Suits, worth regular, 75c—**Special at 55c a Yard**
85c Value Fancy Plaid Suitings for 59c a yd.
40 pieces 40 to 42 inch new effects in plaid Suitings, suitable for separate skirts or complete suits, worth 85c a yard—**Special at 59c a Yard**
\$1.25 Value Panama for 90c a yd
41 inch, all wool Crisp Panama Cloth, the long wearing kind in black and all colors, worth regular, \$1.25. **Special at 90c a Yard**

NEW MAN-MADE SUITS, \$14.75.
Made of fine quality Serge in Navy Blue, Black or Brown, in a tight fitting, cutaway model, jacket lined throughout with guaranteed Satin, prettily trimmed with braid. Handsome Skirt to match. **\$14.75**
worth \$22.50, at.....
SPECIAL SALE OF FINE TAILORED SUITS, \$25.00. In fine quality Broadcloth and Mannish Mixtures, some are tight fitting, with straps of same material, all man tailored jacket lined throughout with Satin, Skirts, trimmed with braid. **\$25.00**
worth \$37.50 value, for.....
THE NEW TOUTEST COAT \$7.50. fully 56 inches long, made of good quality Kersey Cloth, velvet Shawl Collar effect, ripple back, colors Brown, Navy Blue, Castor and Black, all sizes, \$11.75 **\$7.50**
worth \$12.00, for.....
WOMEN'S NOVELTY COATS \$8.00. Made of all wool Brown or Grey Mixture, 50 inches long, elegantly trimmed with Mohair Braid to match, pockets, velvet collar, this is one of our \$12.00 **\$8.00**
Gowns marked.....
GIRLS' SCHOOL COATS \$2.75. 3/4 length, of heavy Kersey cloth, come in Brown, Cardinal and Navy Blue, collar and cuffs trimmed with velvet, metal buttons and fancy braid, for girls 8 to 14 years; they are \$5.00 value **\$2.75** for.....

GIRLS' NOVELTY COATS ON SALE AT \$5.00 of pretty Mannish Mixture in Brown, Blue and Red, velvet collar, loose fitting back, for girls 6 to 14 years, **\$5.00** worth \$8.00, specially priced.....
FUR SCARFS THIS WEEK AT \$6.75 of Brown Martin Fur, 72 inches long, lined with Satin, ornamented with six fluffy tails, fully worth \$10.00; while **\$6.75** they last.....
NEAR SILK PETTICOATS, \$2.75. in Black only made with large flaring flounce, two ruffles finished with small pin tucks and tailor stitching, separate underlay, all lengths, full length worth \$4.00, **\$2.75** on sale at.....
NEW FALL WAISTS \$3.50. made of fine quality Brilliantine, pretty yoke of lace and embroidery, small tucks, full sleeves, with lace cuffs, come in white or cream, waists worth \$5.75, next **\$3.50** **\$3.50**
BLACK SATIN WAISTS AT \$1.45 front finished with clusters of small tucks and tailor straps, separate stock collar, full length sleeves, button in front sizes 32 to 44. These waists are worth **\$1.45** \$2.25, now.....

MONDAY!
SPECIAL
Ribbon Sale
25c a Yard
For Pure Silk Taffetas and a great variety of fancy ribbons, 2 1/2 to 5 inches wide in black white and all colors, qualities that sell regularly at 25c a yard on sale Monday at **25c**

MONDAY!
FOR ONE DAY ONLY.
25c Hem-stitched Pillow Cases
Size 45x28 Monday, each—**16c**

Black Peau De Soie
Black Peau De Soie, 32 inches wide, very high lustrous quality, elegant black, suitable for entire dresses and waists—regular value \$1.50. Sale price.....**\$1.20**
Black Taffeta Silk
Black Taffeta Silk, 32 inches wide, fine grained all soft, will not crack, suitable for entire dresses and waists, regular value \$1.45. Sale price.....**\$1.15**

Fancy Brocaded Silks
New Arrivals in Fancy Brocaded evening silks, comprising Taffeta Satins and Messalines in elegant floral designs and stripes also Persian designs, and others suitable for evening gowns and waists value \$1.00, \$1.25, \$1.50, \$1.80, \$1.75 and up to \$5.00 per yard.

LONG KID GLOVES
Another week of extraordinary values, another sale of the world's best makes, most reliable qualities that have no superior for it or come at prices away below regular value or standard selling prices.
Ladies' 16 1/2 length fine French kid gloves in black, white and every desirable color or shade, all sizes, a glove you cannot duplicate for less than **\$3.39** a pair, on sale at.....
Same style and quality in 12 1/2 length, in all sizes, and colors, a very popular length, that reaches just to the elbow, on sale next week at **2.95**
A B length finest French kid Mousie gloves, with 3 sharp wrist, not a complete line of sizes in every color, but some color in every size, and excellent \$2.75 grade to close out, next week, for a pair, **\$1.75**

VALUES IN Youths' and Boys' Correct Clothing
That are absolutely beyond comparison.
Three things you're always sure to get at Auerbach's: Correct style, serviceable quality, unequalled values. Here are specials for next week.
Young Men's \$10 Suits at \$7.50
This line is a strong one with us. For wearing qualities and general appearance our \$10.00 suits are unequalled anywhere. The fabrics are of the popular shades in brown or gray and blue or black. Don't fail to take advantage of this special offer!
Young Men's \$12.50 Suits, \$9.85
In this line are black or blue Tweeds and blue serge; fancy (Tweed, worsteds, chevilles and cassimeres in the new brown, gray and other shades of this season. These suits will more than meet your highest expectations. They are exceptional values at the regular price.
Boys' \$2.50 Suits at \$1.95
Double-breasted Suits for boys from 4 to 14 years of age, in black or blue chevilles and fancy mixed patterns. These are well made and are of good wear resisting materials. Well worth more than \$2.50.
Boys' \$3.25 to \$3.75 Suits, \$2.50
For dress suits or school suits you can be suited out of this collection of suits. There are about a dozen patterns to choose from, any one of which you would not hesitate in selecting. An opportunity to fit the boys out at a great saving.
Boys' \$4.25 to \$5 Suits, \$3.75
These are the best of this season's beautiful creations in boys' clothing. The patterns are rich and attractive, the tailoring first class, the styles modern. The only fault is that the price is so low. Dress your boys in a first class suit at a saving of 20 or 25 per cent.

MONDAY!
SPECIAL
Knitted SKIRTS
Best 50c Value for 25c
Ladies' Gray Knitted Underskirts, buttonhole stitched around the bottom, a splendid 50c grade on sale at—**25c**

Breakfast Cloths
8-4 and 10-4 sizes, 2 and 2 1/2 yard lengths, with and without drawn work borders, beautiful patterns, Monday, each—**\$1.18**

At Popular Prices
From our popular priced Shoe Section comes news of vital interest, and although we are always noted for wonderful value giving in that section, this week's offers will make all previous offers look insignificant in comparison.
Ladies' Extension Sole Street Shoes with dull kid tops, blucher cuts and Cuban heels, all sizes, \$2.75, at, per pair.....**\$2.20**
Same style shoes as above, only in better grade, with good wear, white soles, value \$2.25, special at, per pair.....**\$2.65**
Ladies' Street Pat. Kid Street Shoes with buckram uppers and dull top, value \$2.50, at.....**\$2.65**
Children's Kid Lace Shoes, patent tip and spring heels, sizes 5 1/2 to 8 1/2, at, per pair.....**75c**
Boys' Box Calf Shoes with extension soles, sizes 7 1/2 to 9 1/2, at, per pair.....**\$1.96**
Infants' Soft Sole Shoes, black or brown, at, per pair.....**25c**
Ladies' Strap Slippers for house wear, all sizes, value \$1.50, at, per pair.....**\$1.15**
Little Boys' Calf Shoes, seamless or regular cut, sizes 9 to 14, at, per pair.....**\$1.25**
Complete stock of New Rubbers for everybody now in.

Charming Millinery
Surrounds you on every side just as you enter the Auerbach Millinery Section—step up and examine the price tickets—they tell the story of the bargains much better than we can. Notice how busy the Millinery Section always is, too.
BEAUTIFUL HATS AND LOW PRICES
Meet each other in this popular department next week.

4 BLANKET ITEMS
FOR NEXT WEEK'S SELLING THAT ARE WONDERFUL
AND
Their price will greatly surprise you. You never saw one of them sold before at any such price.
200 pair double fleeced Flannellette sheet Blankets, in either white, gray or tan, all double bed size, 11-4 and 12-4, value \$1.39, **\$1.18**
100 pair thick, heavy and warm covering Blankets, 11-4 size, weight 5 pounds, value \$2.50, **\$1.48** go next week, per pair.....
11-4 size white Wool Blankets, (unwashed) value \$4.00, **\$2.60** go next week, per pair.....
Extra large size Wool Blankets, eastern and Oregon makes, white, gray and mottled, 11-4, 12-4 and 13-4 sizes, all worth \$7.50, go next week, per pair.....**\$5.20**

FLANNEL ECONOMY
Such as this doesn't come your way very often, so of course, we expect you here next week.
50 pieces cream-white cotton Shaker Flannel, double fleeced, 3/4 wide, value 11c, next week, per yard.....**8c**
2,000 yards full bleached Twilled Night Gown Flannel, value 15c, next week, per yard.....**10c**
The heaviest unbleached Canton Flannel, 32 inches wide, regular 12-3/4c, next week, per yard.....**12c**
Non-shrinkable Scotch Wool Washed flannels, in the plaid and black effects, have no equal for wear and washing qualities, value 50c, next week, per yard.....**29c**
The new Mohair finished Panama Wool Waistings, in the pretty plaid effects, next week, per yard.....**60c**

MONDAY!
SPECIAL
LITTLE FOLKS' OUTFITS
Worth \$1.25 a Set at 99c
Little Folks' Outfits consisting of Sweater, Long-sleeved and Stocking Cap made of fine wool yarn in all white or pink or blue border, an exceptional good quality cheap at \$1.25 a set on sale at—**99c**