

Explorations in Patagonia.

By Prof. J. B. Hill, Princeton University.

PHYSIOGRAPHICALLY, Patagonia is divided into two sharply defined regions—an eastern level and comparatively barren plain and a western exceedingly broken and mountainous region. The former extends eastward from the base of the Andes, where it has an altitude of 3000 feet to the Atlantic coast, where it terminates in a continuous line of precipitous cliffs 300 to 400 feet high.

Three distinct features characterize the topography and tend to relieve the monotony of the broad Patagonian plains. The first of these is the series of escarpments, from a few feet to several hundred in height, encountered at successive altitudes as one proceeds from the coast inland toward the Andes. These escarpments have a general trend parallel with the present coast line, and they doubtless mark successive stages in the final elevation of the land above the sea. The second feature is to be seen in the series



TEHUELCHES MAN, SQUAW AND CHILD.

of deep transverse valleys crossing the territory from east to west and constituting the present drainage system. In so far as my observations have gone, these are all true valleys of erosion. The third and perhaps most striking feature in the topography of eastern Patagonia are the volcanic cones and dikes, and the resulting lava sheets, which, covering extensive areas throughout the central plains, are seen capping most of the higher table lands and frequently descending well down the slopes into the present valleys, while the extinct volcanoes often rise majestically hundreds of feet above the surrounding plain.

In a line approximating the seventy-second meridian of west longitude, the Andes rise abruptly from the plains and form one of the most rugged and in many respects most picturesque mountain chains in the world. Many of the peaks attain an altitude of over 10,000 feet, quite sufficient at this latitude to precipitate most of the moisture in the atmosphere as it is forced over from the Pacific. Owing to the southwesterly winds which prevail here throughout the year, the atmosphere during its long journey across the Pacific becomes saturated with moisture, which, together with the completeness of the precipitation brought about by the advantageous topography of the western coast, renders this region one with an exceedingly



BALANCING ROCK DUE TO EROSION.

high annual rainfall and consequently luxuriant vegetable growth in striking contrast to the dry and comparatively barren eastern region, where winds, already deprived of most of their moisture during their passage over the Andes, are usually dry and hot. The prevailing winds in eastern Patagonia, as in western, are southwesterly, and an easterly wind of twenty-four hours' duration on the eastern coast is sure to terminate in a heavy fall of rain or snow.

Not all the moisture of the mountainous region is precipitated as rain, for in the higher Andes severe snowstorms prevail throughout the entire year, ample for the formation of great ice fields, from which extend numerous glaciers, many of which reach

Formerly these glaciers were much more extensive than at present, and they doubtless contributed to the erosion of the exceedingly intricate system of mountain gorges and floods now forming so conspicuous a feature of the region.

The slopes of the Andes below an altitude of 3000 feet are covered with dense forests, especially on the western side. The variety of trees in the southern regions is very limited, and the quality of the wood for lumber or timber for building is poor. Two spe-



TEHUELCHES TAKING YERBA.

cies of beech, *Fagus antarctica* and *F. betuloides*, the latter an evergreen, are much the commoner of the trees. The deciduous beech is especially abundant, and is the only tree found throughout extensive areas on the eastern slopes of the Andes.

Within the dense forests, lichens, ferns, mosses, and other cryptogams grow in great profusion, entirely covering the ground and trunks and lower branches of the trees. The delicate foliage and variety and harmony of colors of these plants, always fresh-



AN OLD TEHUELCHES.

ened by frequent showers, enhance the other natural beauties of this region, and give to the quiet depths of the forests a peculiar attractiveness, contrasting strongly with the rugged canons and serrated crests of the higher Andes.

The most conspicuous animals of the forest region are a small deer, not quite so large as our Virginia deer, the male with usually only two points on either horn. The puma, or mountain lion, is abundant both on the plains and in the mountains. There are two species of dogs. The larger, *Canis magellanicus*, is about the size of a small collie, of a reddish brown color, and frequents the wooded regions. It is rather shy, in striking contrast with the smaller *C. azare*, abundant in the plains, of a light gray color, and about the size of a small red fox. The guanaco or South American camel is very abundant over the plains, and occasionally enters the wooded mountainous districts. Among the birds, two, from their size, are especially noteworthy, the rhea, or so-called ostrich, found in great numbers on the plains, and the condor, common in the Andes, along the high bluffs of the sea coast and about the basalt cliffs of the interior plains region.

The natives of the eastern and western region belong to two entirely distinct races, differing from each other in their customs, language, and mode of life. To the eastern region belong the Tehuelches, a large, well-developed and peaceable race, living entirely by the chase. They construct their habitations and make their am-

other game animals and birds they are exceedingly proficient and show much ingenuity.

The Channel Indians of the western region are physically much inferior to the Tehuelches. They are essentially a maritime people with all their activities clustering about the shore, from which they never proceed more than a few miles inland. They subsist chiefly upon shell fish, the flesh of seals, fish, and the sea otter and a few edible fungi indigenous to the region they inhabit. From the skins of the seal

and sea otter they construct their clothing, usually exceedingly scanty, notwithstanding the inhospitable climate. Rude huts are sometimes built from the branches of trees, but they spend much of their time in small open boats made of beech bark sewed together with whale bone. It is in the construction of their boats and the implements used by them in the capture of seals that they show the greatest skill and resource.

Although the plains of eastern Patagonia are exceedingly monotonous and uninteresting to the casual observer, yet they are of the greatest interest to the geologist and paleontologist, for it is the rocks composing them that contain the remains of the extinct animals that in former times inhabited this region. In many places along the river valleys there are extensive exposures of the sedimentary rocks rich in fossil remains, and the high bluffs of the sea coast have proved among the most promising localities for the collector.—Scientific American.

Locomotive Safety.
Apropos of the danger to horse-drawn vehicles and their drivers from automobiles, the case of the recent 1000 motor; tour of the English Automobile Club should be considered. The route was over a purposely selected hilly country, the object being to test the staying ability of the various machines, some of the machines negotiating excessively steep gradients at a much faster pace than a horse-drawn vehicle could possibly maintain. Notwithstanding this and that the several vehicles entered in the race covered in the aggregate 60,000 miles, not a single accident of any kind occurred to other users of the road through any of the motor cars.



The Girl in the Sombrero.

Some of the girls have taken to the sombrero, and are rigging themselves out in Mexican garb. The sombrero is of finely-woven grass, embroidered with silver, and is a comfortable companion, an enemy to freckles and just the thing for a country jaunt. Mexican shirt waists, too, are in demand, elaborate affairs in drawn work, with hemstitched seams and turned-back cuffs. Worn together the combination of these two is very striking.

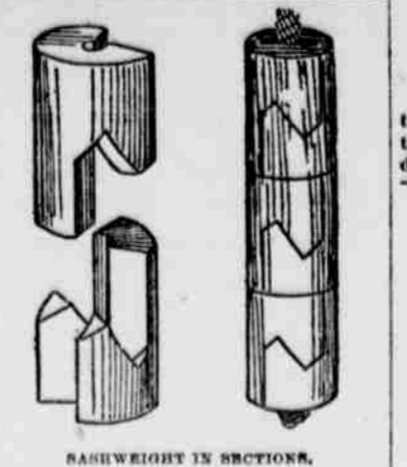
Soft Tread Woven Wire Mats.
Woven wire mats are shown and one maker has a novelty in their treatment. He embodies in the mats pieces of rope, and these, protruding between the interstices of the wire in which they are embedded, produce a soft tread that is very agreeable, yet at the same time they are so fully protected by wire that the durability of the mat is not lessened.

It is estimated that it costs thirty per cent, more to make bread by hand than by machinery.

ADJUSTABLE SASH WEIGHT.

Made in Interlocking Sections in Order to Secure Any Weight.

A new sash weight has been invented by Eugene S. Crull. It is made in sections so as to facilitate the adjustment of the weight to meet any



SASHWEIGHT IN SECTIONS.

emergency. The two parts of which the weight is formed each consist of a body section with an open portion and a branch, the branches fitting in the open portions of the bodies. Each part has also beveled flanking branches which interlock to sustain one part on the other. The parts have grooves which match to form a passage for the reception of the sash-cord.

It is evident that the number of weights can be increased or decreased at will to regulate the stress on the cord. When the proper number have been applied the weights are held securely by a pin driven through the cord or a split washer clamping the cord and engaging the uppermost weight.

The Fruit Cure.

Twice it has been my privilege to take "the grape cure" in Switzerland. For ten days the schools are discontinued that teachers and scholars, with fathers and mothers, may repair to the vineyards and eat grapes all day long. For ten days the druggists mourn because customers are not, and for as many months nature's patients feel the good effects of the cure wrought in a pharmacy which is not of man's furnishing.

For forty years I have taken the "fruit cure" all the year round, and have to offer in advertisement thereof a perfect digestion, steady nerves and such general vigor as is vouchsafed to few women of my age.—Marion Harland, in Philadelphia North American.

A Taciturn General.

Moltke's reticence was so proverbial, says the Argonaut, that, as the King's birthdays approached, there used to be bets among the officers as to how many words Moltke would use in proposing the toast of the day. Some backed a nine-word speech, others put their money on eight words. Moltke's habit was to say: "To the health of His Majesty, Emperor and King," or "To His Imperial Majesty's health." In 1884 an oyster breakfast was staked on the Marshal's not using more than nine words. But, because he began with the word "gentlemen," the bet was lost. The loser comforted himself by saying: "He's aging, is Moltke; he's getting loquacious."

High Wages in England.

Often the wage worker has an income far exceeding that of the professional man. Smiles says that in his day rail rollers had pay equal to lieutenant-colonels in the foot guards; plate rollers equal to majors; roughers equal to those of lieutenants and adjutants. In our own country the wage worker's income often averages more than that of the clergyman.

"Waste Not, Want Not."

Over the kitchen fireplace at Abbotseford, Sir Walter Scott's lovely home, are carved in stone "Waste not, want not." There is nothing nobler in the life story of Scott than his struggle to pay his creditors' debts incurred through the misfortune and mismanagement of his publishers.

Beet Harms Honey.

Great losses have been sustained by Kentish beekeepers owing to the intense heat having run the honey from the comb, making it useless and smothering many swarms of bees.—London Express.

A Curious Temple.

The pagoda at Pao-tah is the most curious in China, and is regarded with



THE PAGODA AT PAO-TAH.

great veneration and respect by the Chinese, for it is the only pagoda on which trees may be seen growing.

THE EDICTS OF FASHION.

New York City.—The skirt that falls to the instep and cleaves the ground by two or three inches grows in favor day by day. No longer model rivals



LADIES' SHORT THREE PIECE SKIRT.

of three tucks, which go around the skirt. The corsage has a jabot front of shiny black Spanish lace. Deep points of Spanish lace are applied in the bodice in front and in back. The sleeve is in two parts, a close-fitting upper of crimson foulard, and beneath it is an undersleeve of black lace over crimson chiffon. The neckband is extremely plain and hooks in the middle at the back.

Cluny Lace Collar Band.

"Grand chic" is the verdict pronounced on our new neckband made of Cluny lace. Cluny, being a rather heavy lace, stands up well, washes and wears equally well. If you can find the correct width you need, and put ribbon under it as a transparent, your task is then easy, as collar stiffening and color shades are bought ready made. Perhaps you can get Cluny lace especially woven with bits for inserting ribbons. This makes a stylish and novel collar band.

Terminate at the Waist Line.

The majority of the best corset covers terminate at the waist line, and their fronts are in surplice form. The high-necked or half-high corset cover is no longer used by the best-dressed women.

Autumn Dress for a Girl.

Charming and attractive as guimpe gowns unquestionably are, every mother realizes the utility of the model that can be made of one material, and that does not inevitably involve the dainty yoke and sleeves that must be laundered after each day's wear. The very pretty and stylish May Manton design shown has the merit of allowing the guimpe, when desired, and of being equally available for the long,



LADIES' DRAPED WAIST.

which form a deep inverted pleat at the back. As shown, the material is tan-colored cheviot, simply stitched down the front two seams and round the lower edge at the top of the facing. Any quiet tone is suitable, however, and the trimming can be changed to stitched bands or braid, if preferred. As shown, the length is correct for walking and golfing.

To cut this skirt for a lady of medium size three and one-half yards of material forty-four inches wide, or three yards fifty inches wide, will be required.

Gives a Graceful Effect.

The attractive May Manton model shown in the large engraving is sufficiently snug fitting to avoid all sense of looseness, yet is draped across the front to give a most graceful effect. Cashmere, which is to be much worn during the autumn and winter, and all soft wool stuffs, as well as lace, foulards, crepe de chine and liberty silks, are eminently appropriate. As illustrated, the material is a foulard in pastel blue, with black, with trimming of black velvet ribbon and yoke of plain blue banded with velvet.

The foundation for the waist is a fitted lining that closes at the centre front. The back and underarm gores of the material are plain and without fulness, but the right front is cut to form a drapery below the yoke and hooks well into the left side, the closing being concealed by the folds. The yoke is smooth and faced into the lining at the back and right front, but hooks into place at the left shoulder and arm's eye. The circular berth is cut in three overlapping sections that give pretty fullness over the sleeves. One or two sections of the berth may be omitted if a plainer effect is preferred. The sleeves are two-seamed and fit smoothly without being overlaid.

To cut this waist for a woman of medium size five and one-half yards of material twenty-one inches wide, or two and three-eighths yards forty-four inches wide, will be required.

A Fancy of the Time.

Small black rings figure the surface of a cranberry crimson foulard gown for late afternoon or evening wear. The skirt has a front gore laid in fine tucks and circular sides, with a border

of three tucks, which go around the skirt. The corsage has a jabot front of shiny black Spanish lace. Deep points of Spanish lace are applied in the bodice in front and in back. The sleeve is in two parts, a close-fitting upper of crimson foulard, and beneath it is an undersleeve of black lace over crimson chiffon. The neckband is extremely plain and hooks in the middle at the back.

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DRESS FOR A GIRL.

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