Of course every one knows that tal-

The horns are taken off, polished and turned into footstool legs, and va-

The dry bones are a fertile source of ncome. To start with if they are good

for nothing else they are ground up

Polished they are made into combs, backs of hair brushes and a thousand

Pepsin for chewing gum and digest-

ve apparatuses come from the stom-

The bones when put into a certain

vat become soft and are then com-pressed and used in the manufacture

f knife handles. This particular bone

From a other part of the skeleton

The horfs are polished up and made

other articles in which bones figure.

found in every able-bodied cow. Oleomargarine also comes from the cow when she is so dead that she can

and made into A1 fertilizers.

THE UNDEVELOPED RESOURCES OF UTAH

Prize Article Written for the News by Prof. L. E. Young.

out of whose hills thou mayest dig

scittious stories about Utah. Facts are wanted and they will be my resort in describing the great undeveloped re-

Utah is peculiarly situated. Over a mile above the level of the sea, surrounded by mountains whose peaks almost in the heart of the Rockies bederful and beautiful garden spot. Supproves this. Utah's mines of gold, silyer, copper and lead in 1890 yielded 114,400,000; its farms, orchards and and herds \$5,000,000; its coal, iron and other minerals \$1,000,000; its salt and ing for a new land.

developed resources. We have a right about and in Iron, Washington, Kanab

seems that the old residents have been them. In one group of claims alone it 15,000,000 tons of iron ore in sight, rangestimated that they have 22,000,000 tons center for the mining of iron. But this Juab, Utah and Summit counties esand useful product. A few summers 4go I spent the time in looking over the mining districts of Tintic. A large been dug thousands of tons of iron, interested me. An old miner once standing by me remarked: "There are many deal of iron is found in the mountains just east of Ogden City, and around Park City, Provo, in the Deep Creek is to be found all through the mounlent limestone which can be used for can be no doubt that our State is to be filled with many extensive iron works and rolling mills for the production of seel rails and boiler plate. Think of the thousands of tons of iron in sight throughout the Wasatch range and then the millions of tons of limestone found out in Parley's canyon, and also hat east of the Warm and Hot sul-thur springs above Salt Lake City; then again the vast quantities of salt that could be obtained from our Dead Sea. These three great products go land in hand, for salt and limestone are becessary for the smelting of iron. Can anyone imagine a better field for the

investment of capital? THE PRECIOUS METALS.

tothing that is so encouraging as the reliow metal-gold-or the white metal sliver. Every Utahan knows of the tast amount of wealth already produced by the mining of these metals. It it is impossible to tell of the vast millions of dollars of gold and silver that lie hidden in mother earth. ever, we can conclude some points from the theories of science. Then on the other hand we have other proofs of the revalence of these metals. Gold is found either in quartz veins intersecting metamorphic slates or in gravel diffs. Sometimes it is associated with metallic sulphides; particularly the sulof iron. "When such a vein," ays Dana, "Is found with meteoric fencies, the pyrites is oxidized, and stains of gold are found in the honeycambed structure, which is a result of this oxidization." Much gold has been found here in this way. There are prospects of finding more. But practically ally speaking, what are the proofs? Utah, in 1890, produced over \$14,000,000 worth of gold, copper, silver and lead. What county of Utah does not boast of hese metals? Away down in Wash-ington county bordering on Nevada and Arizona, are large bodies of silver one chiefly in the form of chlorides. This region his been but little explored, and there can be no doubt that many valuable mines will yet be found mountains and canyons down there. Five million ounces of silver have already been taken out. A few ago a wild rush was made to a region in the southern part of Cache where, it was said, silver was found in vast quantities. A great many stories have been published concerning this rest. this region, some of which are no doubt

the region was forgotten, as no railroad ran near enough to make mining profitable. Sometime in the early ninesince then some of the largest veins of gold and silver in the country have been found and developed. Says one of prominent mining men: untold wealth hidden away in the earth just beyond the great American desert." Then again there is copper. There are more than fifty copper properties already, and not a day passes but what some new claim is taken up. Let us company of eight men began to develop three claims almost on the old pioneer from there. During the present winter season the tunnel and shaft will be worked. The old pioneers possibly traveled over vast copper and gold fields. Who can tell? We might go on

the precious metals that is yet to be from the bowels of the earth. Mining in Utah is yet in its first stages. My table below will show what counties are ready for the capitalist and miner. Near the banks of the Colorado and Grand are the Henry mountains. The group rises over 10,000 feet into the air and is well timbered and watered. These mountains are as yet unknown and unprospected, that is comparatively speaking, but many confirm the re ports that there is an abundance of gold found there. Copper and silver are also found in abundance. Much of the ore may be treated by the cyanide process, and the copper is an excellent ore for concentrates. Few men have gone into this region, and yet it is an inviting field. The great Bromide mine has been worked since 1893, and there are prospects of many more such mines

and on telling of the vast amount of

Then again there are the Blue mountains situated between Grand and San Juan counties. The foundation of these mountains is granite quartz, slate and carboniferous limestone. Gold is almost unlimited in this region. watered, so that beef, mutton and vegetables are plenty. The veins of gold here are mostly in porphyry and granite, and much free gold has been found. Not far from the mines, coal is in abundance. It looks now as if the Henry and the Blue mountains are destined to became great mining districts in the not far distant future. Utah is truly rich in gold, silver, copper and The copper industry especially has hardly been opened. Our State has already produced from her mines \$200,-

SULPHUR DEPOSITS.

Blessed with nearly every resource Utah is not without sulphur. In the sively mined by Ferdinand Dickert, and 10,000 tons have already been taken out. Many geologists claim that our sulphur is as good and pure as the celebrated sulphur of Sicily. Hon. Thomas Kearns, of Park City, in speaking of this industry, says: "I believe that Utah sulphur can be mined at a profit, Very few people have an idea as to the extent of the deposits. Sulphur exists in scores of localities. Personally I am not interested in that phase of mining, but to those who are and understand it thoroughly, I believe that Utah offers a great field." A great many of our sulphur springs deposit sulphur. The sulphide of hydrogen (H. 2 S.) deposits the sulphur by oxidation of the hydrogen. Gypsum is often thrown down in this connection, sulphuric acid being formed by the complete oxidation of the H 2 S, and the reaction of this acid on the carbonate of lime in the water. Such deposits are found north of Salt Lake, and Ogden, and in the southern part of our county. Pure native sulphur is also found in Summit, Iron, Juab and Utah counties quite ex-

SALTPETER MINES.

Another constituent in the mines of Utah is nitrate of potash or saltpeter. This compound is used in the curing of meats, and preventing decomposition. It is a preventive for all bacteria. A few years ago a mine was opened up in Goshen which attracted considerable attention, when the war with Spain was about to begin. Another mine in Big Cottonwood has been opened up recently in which a ledge has been found with nitrate running from 4 to 15 per cent nitre. Nitre, it must be remembered, is both a natural and an artificial product. It has been found in different parts of Europe, Egypt and Peru; but the country in which it is mostly produced is India. In the United States, it is found for the most part in caverns, situated in limestone rock, called saitpeter caves. These caves are particularly numerous in Kentucky. "American Journal of Pharmacy" January, 1866, is a report of Dr. Harrison on the subject of Saltpeter found in the Rocky mountains. He maintains that this product is no doubt abundantly distributed in our western mountains.. Since then, in fact it is only very recently, that our own deposits have been found. If this product is extensively produced in the future it means a large sum of money for some-It is a powerful antiseptic, and In the laboratory it is used to make black and white flux as an oxidizing agent. It is also used extensively in the arts. This is really one of our great undeveloped resources. It means a great deal for us some day.

UTAH HYDRROCARBONS.

It would take pages to tell all about our hydrocarbons. Space is too limited to go into detail. Of course our coal comes first. This industry has been quite extensively developed. The Utah coal measures cover fully 30,000 square miles. A very large majority of the coal lands are yet, however, in the possession of the United States government, and for this reason many are still undeveloped. It suffices to that coal will yet be found in far greater abundance than it is today. But the real hydrocarbons are gilsonite, ozocerite, slaterite, common asphaltum and petroleum. All these compounds exist in Carbon, Uintah, Garfield, Piute, San Juan and Grand counties. Of the hy-drocarbon compounds, there are the following classes: (From Dana's Mineralogy.)

 Simple hydrocarbons; marsh-gas, mineral oils and mineral wax. 2. Oxygenated hydrocarbons: most

3. Asphaltum and mineral coals. The gilsonite industry has already reached extensive proportions. chief mines are situated near Fort Duchesne, in Uintah county. It occurs in fissures in the red and gray sandstones. This product is now shipped to all points in the United States and into every country in Europe. From it are made varnishes, paints, etc., and now the great firm of Assyrian Asphalt Co., in Chicago, Illinois, depends on it en-tirely for the manufacture of these Moldavia and Wales first produced it. Ozocerite is soluble in ether and from this is a region which is as yet it are made wax and tapers or candles.

natural rubber. It is found abundant-ly between Price and Ft. Duchesne and great manufacturing State. What is at other points on the Uintah reservation. In the San Rafel mountains, some | and our cattle; our beets for sugar, and thirty miles from Castle Gate, jet is found. Jet is a deep black in color and has a high lustre. It receives a bril- | go further with the electricity produced liant polish and is set in jewelry. Jet has been known from the time of Pliny, and has been used by all civilized and facture hydrogen, which is now used semi-civilized peoples. In time the out-put of this mineral will constitute a

paying industry on a large scale. Mineralogists tell us that the best asphaltum comes from the Dead Sea and in the neighborhood of the Caspian. remarkable locality occurs on the island of Trinidad, where there is a lake of it about a mile and a half in circum ference. But now Utah is coming to the front in the production of article. It is found at Thistle and on the Uintah reservation, also along the Green and Grand rivers, and the quantity is so great as to insure the support of the asphaltum industry for years to come. Hundreds of tons of asphaltum have been shipped already, but it will take a railroad to the large mine producing it to make it a great and profitable industry.

NATURAL GAS.

Of the simple hydrocarbons, our natural gas comes first. Natural gas varies in composition according to its source. Our product which is obtained through boring, is chiefly pure marsh gas, with some nitrogen, carbonic acid and a little hydrogen. Our largest gas wells in the United States are in Ohio and Pennsylvania. Natural gas was first used for lighting in Fredona, Erle county, N. Y., where it is given out from springs. As early as 1872, Pennsylvania and New York began to use this compound, and since then many western States have put it to use, after for lighting and heating was in China In the petroleum region of Bahu, on the Caspian seas are "eternal fires," regions where this gas is forming down in the bowels of the earth. So Utah has natural gas. It is found at almost any point between Ogden and the shores of Salt Lake. Some think our gas wells have proved a failure. But if we judge from what we have experienced al prove a profitable investment for capitalists. Think what a saving it would be to the citizens of Salt Lake? With gas of average composition, 1,000 cubic feet have, theoretically, the heating power of about 54.4 pounds of bituminous coal and 58.4 pounds of anthracite so that 41,000 cubic feet of gas are equivalent to 2,240 pounds, or a ton of say that 30,000 cubic feet of gas is equal in heating power to one ton of coal." quote these figures in order to show the great value that our gas wells have for us, providing they are constant in their flow. More gas wells are to be discovered no doubt, and it will mean untold wealth and saving for Utah's

Does petroleum occur in Utah? The members of the Chamber of Commerce have often been asked this question. This hydrocarbon exists over a con-siderable area of our State. It shows up at scores of points along the Grand and Colorado rivers. It oozes from the cliffs and fissures. As yet very little work has been done on the Utah petroleum fields. Petroleum is yet to become a chief natural resource of our State, and when it does it will constitute a large per cent of our mineral wealth. Petroleum is from the Greek, "petros," and the Latin "oleum" oil, and when found in the rocks it has been formed through the decomposition of animal and vegetable substances. It occurs in the rocks of all ages from the ower silurian to the most ancient. Surely we have plenty of it in Utah. So much for the hydrocarbons. Nature has especially blessed us by placing within our reach such valuable re-

sources. They are yet undeveloped. Capital and labor are yet to put them into all the markets of the world. THE GREAT SALT LAKE.

The most wonderful feature of all this

beautiful State is our Salt Sea. For

among scientific men whether or not its waters could not be put to some practical use. Many elements and compounds were found in solution, and now, after thorough examination, we can call it the great bonanza of the west, "Wealth abounds here." It is said that there are 1,505,433,600,000 cubic feet of water. Of this 162-3 per cent is salt and sulphate of soda. words, there are 250,905,600,000 cubic feet of these solids. "This salt is of purer quality," says Dr. J. T. Kingsthere is enough to supply the world for a century. Down underneath the sandy bottom, there is a layer of sodium sulphate ranging one foot to three feet in thickness. It has been reckoned that there are over thirty-one billion cubic feet. This compound could easily be hauled to some factory near the lime-stone quarries of the Wasatch, and with coal, in connection with the limeis used extensively in medicine. In best sodium carbonate and bicarbonate pharmacy it is used to make nitric acid. in the world. Today, carbonate of soda is made according to the Le Blanc process. Common salt is used and is converted by sulphuric acid into sulphate of sodium and then decomposing the sulphate by carbonate of calcium and charcoal at a high temperature, so as to yield carbonate of sodium. The sulphate, first dried, is mixed with its own weight of ground limestone, and half its weight of small coal, ground and sifted, and the whole is heated in a reverberatory furnace, and after heating the carbonate of sodium is produced. This is the chemical process, when soda is artificially made. Note. now how nature has done almost all of the work for us. There are millions of tons of the sodium sulphate precipitated in the winter on the shores and in the bottom of the lake. Near by are coal and limestone, and all that would be needed is a reverberatory furnace, and the proper mixing of the ingredients. Even by the artificial method or Le Blanc's way of making carbonate of soda, there are millions of dollars made annually by somebody in the United States. Here in Utah a man would try in order to manufacture both the cooking and the washing sodas. Figures will tell something. If sodium sulphate were worth \$20 per ton it would net the investor something like \$15,000,000. It common salt sold for \$5 a ten it would mean something near \$45,000,000. not write these figures haphazardly. They are facts. Says one of our noted ments in solution in Great Salt Lake will yet mean millions of dollars for

IMMENSE WATER POWER FACIL-ITIES.

Utah is also blessed with numerous mountain streams flowing into the val-leys. These are Bear, Logan, Ogden, Weber, Provo and Jordan rivers and many other large streams, the waters

"A land whose stones are iron and | gold and silver. For years, however, | for treatment for the same uses as | they must yet be taken and put to | our farming products that could feed thousands of workmen. But we could so cheaply. With it we could decompose water (H. 2 O.) and thereby manufor heating purposes. Chemists have told us that it is only a matter of time before hydrogen as well as coal will be used all over the civilized world. In connection with the development of electricity, the subject of our alumin-

um ores may now be mentioned. With

recent developments of the power of transmission, a strong demand has grown up for some line wire which vould be cheaper and as practicable as copper. Experiments within the last few years have proved that aluminum is the only practical metal for this purpose. Manufacturers of aluminum offer the customer a conductor for 2 per cent less than a copper wire would cost. The first use of aluminum wire here in Utah was made by an engineer in Utah county. The line extends from Provo river to the Tintic mining district. The raw material, buxite, is common in Utah. It is found in abundance near Draper. An analysis of the clay by Prof. Hadley, of the University of Utah, shows about 20 per cent of available aluminum oxide. In richness this is equal to the Georgia buxite now used extensively in the east. A plant lo-cated at Draper is a possibility of the Aluminum in connection with our electrical energy, its extensive use in the arts and the making of household utensils makes it an inviting proposition for capital seeking an invest-

LIST OF UTAH MINERALS. the undeveloped minerals and metals of our State. James D. Dana, the most eminent mineralogist of his time, who held the chair of geology at Yale college, has drawn up an outline on the minerals of Utah, most of which are undeveloped. I quote. Says Dana: "The silver mines are mostly in lime-stone with eruptive rocks in the vicinity, and argentif, galenite, cerus site, anglesite, etc., the common ores. The veins in slate, or quartzite, in part carry copper ores. There are also shown by Prof. Newberry sandstones in south ern Utah impregnated by ores over large regions.

Beaver County: Bradshaw, cerussite, cuprite, malachite, aragonite cerussite, anglesite, galenite, pyragyrite, larite, argentite.

Iron County: Orpiment, realgar, Juab County: Galenite, anglesite, cerrusite, malachite, cuprite, bisusorthite, parosite, calcium, arsenate, topaz. County: Galenite, cerussite, malachite, chalcocite, strahedrite, anglesite, coulfenite,

Salt Lake County: Galenite, cerussite, anglesite, malachite, evulgenite, chalcopyrite, barite, binnite, orpiment, realgar, ozogerite, buxite. Summit County: Cerussite, argent-

ite, malchite, tetrahedrite. Tooele County: Stibnite, galenite, erussite, malachite, chalcopyrite. Wasatch County: Galenite, cerus-

site, sphalesite, Washington County: Clays for pottery, native silver, argentite, fossil plants replaced often by silver." Such is the brief outline from Dana To the ordinary reader, the names of these ores are unfamiliar, of course They are, however, the names of the principal iron, copper, gold and silver bearing ores. Antimony is also mentioned

UNDEVELOPED LANDS. The last, and to my mind, the most

important subject I wish to deal with in this paper is the "undeveloped lands" of our State.

In the early settlement of this country, ranch land where no streams for irrigation could reach it was considered worthless or nearly so, as they were only used for grazing purposes. At this date, however, many thousands of acres of these bench lands have been brought under successful cultivation by what is known as "dry farming." In the northern portion of Cache valley in 1898, these dry farms yielded from twenty to forty-live bushels of good wheat to the acre, and the countles of Weber, Davis and Salt Lake had a good showing of this system of grain raising without artificial irrigation. Of course the rainfall has increased con-siderably since the advent of the pioneers into our valleys, and this fact, coupled with the increased knowledge and better system of handling lands, will be a great factor in the near future of solving the problem of how to provide homes and farms for our boys and girls, the men and women of the

Utah occupies a central position in the great arid region of the west. Farmers from the first have had methods of their own in irrigating. The department of agriculture has now been enlisted in promoting the work of irrigation, the oldest method of agriculture. I think that in the not far distant future the arid lands of Utah will be well watered and the land and water will be provided on such terms that a man willing to work even without means, can make a home on the land thus watered. Canals and reservoirs cost money, it is true, but I think we have reached a time when Congress, as the custodian of these worthless lands, will pass laws to develop canals and reservoirs. We have here in our State a great country to be created, that is, from an agricultural point of view. What England has done for Egypt and India, what Italy has done for the valley of the Po, can be done for our arid lands. Until a few years ago no at-tempts were made to divert large streams for irrigating purposes, but now in Sanpete and Sevier counties many reservoirs have been constructed. One company alone has constructed a reservoir covering 40,000 acres and built acres of fertile land will be the result. In Weber, Utah, Juab and Boxelder many strong enterprises have been inaugurated which will be the means of reclaiming vast districts of land.

Land owners in a new country control its prosperity. If they improve their holdings all values rise, labor is employed, merchants find markets for their wares, and all classes share in the benefits of this industry. Farming lands from time immemorial have been regarded with unusual favor in this the best securities for the investment of capital. The condition which gives to farming land its value is its ability to produce in abundance those crops for which there is a demand, and to be so located that these products can find a good market. Utah, as an arid State, furnishes an example of a region where the natural rainfall is insufficient to mature crops without the artificial application of water. In order, therefore, that the land may be successfully farmed, it becomes necessary to involve the aid of artificial irrigation through the construction of ditches, canals and reservoirs. It has been demonstrated State) cannot become a veritable "Garden of the Gods."

Utah is open to home seekers. She invites outsiders to come and live within her bounds as permanent settlers tourists and sight seers no land could be more inviting. You who are tired and whose brains are weary and whose nerves are prostrated, come to Utah. Go to the lake and dip in our salt, salt sea. To those who have chronic ills and ailments, our white sulphur springs and our hot springs of iron and sulphur are a never failing source of restoraties of the highest order-we have culture, chivalry and refinement-in all, a glorious people and State, whose future "INDUSTRY.

SCIENTIFIC MISCELLANY.

A special study of colors and their chemistry has been made by J. G. Vibert, the great French painter. finds that the ancient painters, of the time of Apelles, had only four colorswhite, yellow other, red other and black. In Pliny's time there had been added different chalk whites, lead white and its combinations, massicot, minimum, orpiment(red and yellow sulphide of arsenic), red and purple lakes (made from shells), natural and burnt ochers, cinnabar, indigo, powdered Eman blue, verdigris, brown earths, ivory black and other blacks, and sepia. Later came the red lakes, made from cochineal and from madder, and the vegetable yellow lakes, al-so the true ultramarine blue from the museum of Antwerp contains a collection of the colors used by Rubens, and of these white lead, cinnabar, lapis (ultramarine), the madder lakes, the earths and the ochers have proven very durable, while the vegetable yellows, reds and greens have faded and Of the many colors brought out since Ruben's time, those of anifortunate addition for art. It is concluded that the finest colors are those of pure pigment, with little linseed or poppy oil as a medlum, and that the mineral colors-unlike those from vegetable substances-are generally permanent, but hard to get in purity.

A number of samples of cement from the ancient water conduits of Ephesus and Smyrna have been analyzed proving to be of similar composition, although ranging in date from several hundred years before Christ to three centuries after. The samples were found to be chiefly lime with a small proportion of fatty acids. Experiments indicate the cement was a mixture of two parts of slag or lime with one part of olive oil, as this was hard

Treatment of soil with lime has been suggested to the Paris Academy of Science a sa possible remedy laria, as it has been noticed that countries having a surface rich in lime are free from this malady.

A clever X-ray trick is described by Dr. Gustave Michland in the Scientific American. To heighten the effect a lamp may be placed behind the sitter, in front of whom is then held the ap-paratus, which looks like the lens tube of a camera with a sheet of white paper exposed in full view as the plate, and the rubber bulb, apparently operating a pneumatic shutter, is pressed. result is startling-a picture of the subect's internal organs flashing instantaneously into view in strong colors. The picture is previously painted on the paper with invisible inks—a diluted solution of sulphicyanide of potassium being used for the lungs, a more con centrated solution of the same salt for the heart and the principal arteries, solution of ferrocyanide of potassiun for the larger veins, and a weaker solution of the same salt for the stomach and a few intestinal coils. For the rest of the body is used a concentrated so ution of tannin. The tube really contains only a small atomizer, and pressure on the bulb forces from this the paper an invisible spray of ferric chloride solution, producing well known chemical reactions.

In a case reported by Dr. Woods, the only patient he had seen to recover from tetanus was treated by hypodernic injections of ten per cent solution of carbolic acid every half hour, except when quiet at night, until able to swallow. A dram of the solution in glycerine was then administered every three hours until the spasms ceased, and after that less frequent and smaller doses until all rigidity had disappeared. Like treatment proved effective in a case of etanus in a horse.

Milk containing five per cent of borax is proposed by M. Ed. Crouzel as a general antidote to poisons. Boric acid precipitated as an insoluble borate by most mineral bases. The casein of milk coagulates with toxic acids, and also forms insoluble caseinates with mineral bases, while the fatty character of milk prevents irritant substance from taking too much effect.

The number of winks in a given time is found by Kotz, a Russian physician, to furnish a fairly accurate measure of the degree of eye fatigue caused by various illuminants. This method gave the following unexpected results from readings of ten minutes: With a candle, 6.8 winks per minute; city gas, 2.8; sunlight, 2.2; electric light, 1.8. A peculiar industry of the island of Procida, is the manufacture of fine silk threads from the stomachs of silkworms. The worm, just before the time of its metamorphoris, is cut open and the membrane of the stomach is careprocess. Holding one end in the teeth and drawing the other with the hands, the work-people then work the tissus into threads of considerable leagth. The threads are prized for strength and flexfbility, and find a market in northern Italy at about \$15 a pound. They are used for fishing tackle, brushes, etc. Production is expensive, as the worms must be taken at the time of their greatest value for silk-making, and the various operations demand much labor

A new primary battery, patented by electrode a carbon that serves as the positive electrode. The electrolyte consists of one part of hydrofluoric acid mixed with three parts of water, with the addition of about two parts of boracic acid. A source of exygen is also added, such as chomic acid, potassium permanganate, or atmospheric air.

A new species of tobacco, Nicotinia Stocktoni, has been discovered by Mr. A. L. Stockton, on Socorro island of the Pacific coast. The number of species of tobacco now known to botanists is

"Heat accumulators" are claimed to save 15 to 20 per cent in the fuel con-sumption of locomotives on a Russian this is a region which is as yet to convert water power into electricity is revolutionizing the mountains of Deep Creek contained it are made wax and tapers or candles. It will no doubt be used extensively in of which could be easily taken and used to convert water power into electricity. What a great significance this need to convert water power into electricity. What a great significance this stance, resembling India rubber. It would be easily taken and used to convert water power into electricity. What a great significance this stance, resembling India rubber. It has been demonstrated beyond question that the soil of trains has lighting our mines in the future. Then used to convert water power into electricity. What a great significance this stance, resembling India rubber. It has been demonstrated beyond question that the soil of that the soil of trains has used to convert water power into electricity. What a great significance this stance, resembling India rubber. It responds to the art of the husbandman when intelligently and skilffully plied. Our climate is the best in the world. Machinery is being run by it and thousands of cities lighted. With our detailed to convert water power into electricity. What a great significance this region is without a superior in the without a superior in the without a superior in the will the weight of trains has lighting our mines in the future. Then used to convert water power into electricity. What a great significance this region is without a superior in the without a superior in the used to convert water power into electricity. What a great significance this region is without a superior in the used to convert water power into electricity. What a great significance this region is without a superior in the used to convert water power into electricity. What a great significance this region is without a superior in the used to convert water power into electricity. What a great significance this region is without a superior in the used to convert water power into electrici

SOME THINGS A DEAD COW IS GOOD FOR.

M. ALIMANDAN ALIMAN ALIMAN ALIMAN ALIMANAN ALIMANANAN ALIMANAN ALIMANAN ALIMANAN ALIMANAN ALIMANAN ALIMANAN ALIMANANAN A are conservators of nature. They do low, suct and chewing gum are also little left except the smell, says a news-

There is no need to enumerate the various kinds of beef cuts they furnish nor of the various brands of vigoral and beef tea they concoct. Those are well known to the public. None but epicures, however, may have heard of the delicious dish of ox mouth, which is served from the lips of the slaugh-

Tripe is made from the animal's

Hides are dressed for the leather, The hair from the hide is carefully saved and goes into mattresses, upholstering, plastering, saddle-blankets, felt and harness paddings.

The intestines are cleaned and used

WE GIVE

YOU

JUST WHAT

ASK FOR.

into fancy ornaments, pincushions, pen wipers and the like, and when this is not done they are put through a process which turns them into glue.

taken out near the knee

elluloid is marufactured.

There is something that ought to be tacked up in every grocery! It's on a signboard over a large New York store in Broadway, where they don't believe that "substitution" pays. And nobody does believe it, except shifty and short-sighted storekeepers. When a woman wants Pearline, for instance, she won't be satisfied to have some inferior washing-powder in its place. It

is a fraud on the customer and a fraud on Pearline. You can help to put a stop to it. When you ask for Pearline, don't let any imitation of it be substituted for it.

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