DARK, DEAD STARS

Millions on Millions of Them Are Flying Through Space.

THE PERILS OF A COLLISION.

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What Would Happen if One of the Larger of These Erratic Derelicts Should Whirl Itself Into Our Solar System. The Birth of a Nebula.

Possibly it has never occurred to many people that there are such bodies as dark stars, but so great an authority as Sir Robert Ball has said that the dark stars are to the bright for numbers as the cold horseshoes in existence are to the red hot ones. For every such hot one there must be many hundreds of cold ones, so that if the simile is sound the heavens must contain an incredible number of these derelicts on the ocean of space, which, having lived their life, have grown cold and dead, but are still racing about at star speed until in their wanderings they meet some other heavenly body in terrific collision.

Such gigantic catastrophe as the clash of two suns, each perhaps mil-Hons of miles in diameter, rushing at each other at the rate of twenty or thirty or even more miles per second would result, so the mathematicians tell us, in a world splitting explosion exactly as if each were composed of billions of billions of tons of gunpow der, and as when gunpowder explodes nothing is left but gas and smoke, so in the clash of stars nothing would be left of the two great solid bodies which had collided but an immense whirling mass of incandescent gas called a nebula, of which, as most people know, there are quite a number dotted over the heavens. This maeistrom of gas would sail about among the stars for ages, in the course of which it would naturally cool down and condense into a star system much like our own, with probably a central sun, planets and moon.

Some of these would sooner or later arrive at a condition of temperature suitable for the support of life and as the centuries passed would become peopled with sentient beings. Gradually they would grow too cold for life to exist and finally become frigid, cold, dark stars once more. The number of stars visible to the naked eye is only a few thousands. With the best telescope and other instruments it is calculated we can detect about a hundred millions-not a large number (there are fifteen times as many people as that living on this glober; but, judging by Sir Robert Ball's horseshoe simile and reckoning only a hundred dark ones to every bright one, we may take it that there must be at least 10,000,000,000 ark stars chasing about in space, me of which we have never seen and probably never will see.

I say most of which, for perhaps it may come as a surprise to some that the earth we live in is a dark star So are all the other planets and planetoids of our solar system, which with their moons, of which bedies, shining only by the reflected light of the sun. there are at least 600 known to astronomers. Nor must we forget to mention those bodies called shooting stars which may be seen almost any clear night if patiently watched for. These, though they look like stars, are hardly, as every one knows, to be dignified by the name, being mostly but very small masses of matter flying about in space. They are quite cold and dark until they enter our atmosphere, which they do at such a speed as raises them at once to a white heat by friction of their passage through it, and thus they are revealed to us.

For every one we see there must be many thousands whose paths miss us entirely, ships that pass in the night. silently and unknown. Some of these are of immense magnitude and are undoubtedly regular in their course. Others are doubtless flying about the beavens on haphazard paths, and it it conceivable that one might come along and collide with us or our sun. undoubtedly be the end of this earth and its inhabitants.

If the intruder were of any respectable size a collision with any of the larger members of the solar system would produce such a confingration as would raise the temperature of all the rest above the point at which life as we know it could exist. "The earth and all the inhabitants thereof would be burnt up and the elements would melt with fervent heat." Even if such a star did not coilide, but merely passed through our system, the effect of its attraction would altogether upset present conditions and almost certainly bring about the cessation of life on the

earth. Neither can we encourage ourselves with the hope that the collision would be too sudden for us to know much about it. No such thing. Our astronomers would see the star directly it got near enough for the sun to light it up, probably fifteen or twenty years before it arrived, according to its size and speed. They would be able to calculate its path and foretell to a few minutes the precise moment of the catastrophe, and we should have the added horror of the anticipation of our slowly advancing doom. Indeed, the passage of even a small star quite outside our system by many millions of miles would still have a sufficiently distanthad effect on us to draw us out of our path and alter entirely our climate and temperature.—Chambers' Journal.

Cheerfulness and content too great modifiers and famous preserves of

PARISIAN SHARPERS

A Decay Bishop Who Happened Caught Off His Guard.

It should not be supposed that the get-rich-quick man is coolined to this country. In fact, there are those who amert that alongside the average Pasisian promoter American sharpers are in the infant class. Here is a sam ple of French methods in such cases which may be characterized as spectacular at least:

A concern known as the Auxiliaire Internationale was launched recently. and those who attended the organization meeting found themselves facing a dignified chairman dressed in a violet soutane. On inquiry they were told that the prelate who had consented to lend his presence and influence to this worthy eleemosynary enterprise was the bishop of Antioch.

Everybody was enormously impressed, and there is no telling what a golden harvest would have been reaped if one restless would be investor had not chanced to stroll back into the meeting room after the affairs of the day were concluded. There sat the bishop of Antioch, his easuack pitched over a chair and a large black eight in the corner of his mouth, discussing with one of his associates the best system

The police who raided the next meeting discovered that the hishop of Antioch was a maitre d'hotel, who received 5 shillings an bour for playing his episcopal part.-New York Post.

A YAWN AND A STRETCH.

They Help the Nerves and Muscles and Rest the Whole Body.

Did you know that a good, wide open monthed vawn is a splendid thing for your whole body? This is the opin on of an English hygienist.

It is one of nature's most evident demands for a rest. Some people think they yawn because they are sleepy But that is not so. They yawn be cause they are tired. They may be sleepy, too, but that is not the ren cause of their yawning. You are sleepy because you are tired, and you vawn because you are tired

Whenever you feel like yawning just go ahead and vawn. Don't try to suppress it unless you are out in very formal society, where your hostess would be grieved.

If you can stretch at the same time that you yawn do that, too, for it is another way of nature's stretching and relaxing the muscles. Indeed, if you are very tired and do not feet like yawning there is nothing that will rest you so quickly as to sit on a straight backed chair and lift the feet from the foor, push them out in front of you as far as possible, stretch out the arms and nut the head back.

Then open the mouth and make your. self yawn. Your tense nerves will relax, the contracted muscles will stretch. and the whole body will be rested -Chiengo Tribune.

No Inventions—Barbarism. What would the world be today without invention?

The most vivid imagination could not picture the state of trade, industry and society if no ingenuity in the various fields of human endeavor had been exercised during the ages.

The world today would be stagnant in all t in which it is active and progressive if genius, enjoying full play and granted adequate rewards, had not provided thousands of aids to every phase of human activity. Scholars and philosophers talk of the dark ages, when man was but little removed from a dumb animal. Yet those ages would have been prolonged had not inventive genius in countless ways. generation after generation, added to the enlightenment of humanity and to its comfort and well being.-Judge.

A Regular Bookworm. The story is told of a certain multimillionaire whose early education had been somewhat neglected who, finding nimself rich, built a tine mansion and isked a friend to procure for him a ibrary of books. The friend obeyed and received a letter of thanks thus worded: "I am much obliged to you for selecting the books for me. I particularly admire a grand religious poem about Paradise by a Mr. Milton and a set of plays (quite delightful) by a Mr. Shakespeare. If these gentlemen should write and publish anything more be sure and send me their

His Virgil and Poetry. "You ought to remember," said a worthy master to a boy bungling over a passage of Virgil, "that you are translating poetry."

new works."-Denver Republican.

"It's not poetry when I translate it." said the boy with pathetic veracity.-A. C. Benson in Journal of English Studies.

Envy. "Bliggins is one of those who envy thers the slightest elevation above ordinary surroundings."

"Yes. His family can't eat a mee!

without being afraid he'll get jealous of the caby and want the high chair." -Washington Star. The Usual Way. 75

"Billy Weldon is dead." "Poor chap. Let's get bony new and say a lot of the nice things about him that he would have been glad to bear." -Chicago Record-Hesaid.

"It is that; my see, which can totals to think he can best a free number

FEROCIOUS DOGFISH.

These Ravenous, Sharklike Gluttone Would Eat a Man Alive.

"'N' be said, 'My God, Frank, shoot me quick, shoot me quick-th' dogs are catin me alive!"

"I bauled up my shotgun, 'n' I pulled buck th' bammers, but I couldn't do it. though I warn't more'n ten feet frum him n' could hev blown his whole hend off. I don't b'I've th' Lord would her called that murder either "I gasped for air 'n' dropped my gun

on th' seat, 'n' then I looked at Chartleagain, 'n' it was all over-jest a dark red in th' water 'n' a hundred ugiy snouts 'n' shinin' rows of teeth jest gleamin' 'n' snappin' thar in th' gray of that October afternoon."

It was Frank Oleson, a fisherman of Rockland, Me., who spoke. He was telling a little group of oilskin clad fishermen about a tragedy of 1885. when he and thartes Freeman sailed out of Tenants Harbor, Me., one October morning. Oleson brought the little sloop Alpine back the next morning alone. Freeman had failen overboard in the midst of a school of dogfish, which had eaten him alive before the eyes of his belpless companion.

They were bound for the fishing grounds off Matinicus island. Freeman had taken along a shotgun. When five miles from Criebaven a bunch of coots, flying low, came skimming along. Freeman tired into them, and three or four dropped. The Amine was brought up into the wind, and with her mainsail and jib flapping the gunner jumped into the dory and started to pick up his game.

There was a shout, a splash, and Freeman was struggling in the water. In reaching over the side of the dury he had lost his balance and fallen into the choppy sea. In a moment the hungry, sharkish dogs were after him. The opening paragraph tells all there

Many stories are related to show the ferocity of the dogtish. It was not more than half a dozen years ago that two New York vachtsmen were lolling along in a sloop yacht in Penobscut bay one July afternoon. One of the yachtsmen, a physician named Bowker, decided to take a plunge. He stripped and dived off the bow of the sloop, intending to pull himself into the tender trailing behind as it passed him. He had scarcely bit the water before he let out a yell. He just managed to catch the gunwale of the ruwboat when his companion reached him and hauled him in. Three ugly wounds showed in his legs where the voracions dogfish had bitten out chunks. He was taken into Rockland, where a physician treated him for several weeks before he was out of danger.-New

Dr. Benjamin E Smith, the noted lexicographer, once made an autobiographical statement which may interest advocates of scientific education, says the Manchester Guardian, Some one had asked his opinion about the best methods of teaching truthfulness to children. "Frankly." be replied, "I know I told the truth as a child purely from a desire to please my mother, as I would have carried out any other course of action on which she insisted. But I never saw any other reason for doing it until as a lad I worked in a chemical laboratory. Then I realized that nothing that was said made the slightest difference to the elemental fact, and I believe I have loathed exaggeration and falsehood

Cost of a Boat Race.

ever since."

A writer in Bailey's Magazine of England has been figuring on the cost of the annual boat race between Oxford and Cambridge and says the expense to each crew may be approximately estimated at \$3,000 for each. He then says that as the contest rarely takes more than twenty minutes the cost works out at about \$300 per minute, or about \$8 every time the oars dip into the water. The cost of the boats is placed at \$250 and the oars at \$70, the rest of the money going for preparation from October until the day of the race.

Room Doors on the Stage.

In real life room doors always open in toward the room itself. On the stage, however, room doors, as a rule, open outward, or away from the room. Exits are one of the most difficult parts of the actor's art, and if he or she had to fumble with the nandle, pull the foor toward them, step round it and pass through they would probably make a clumsy dodge of it. That is why, as a rule, doors are constructed to open outward at a push.

Made Him Hungry. "I'm hungry," complained a husky husband the other day. "But you just had breakfast," argued his wife.

"I know it," answered the husband, "but as soon as I finished I drank a giass of water, and all those flannel cakes sbrank right down to nothing." -Milwaukee Sentinel

Brings the Friends. "A man never knows how many friends be bas until be experiences real softew."

"Oh I don't know! Did you ever have it known that you had shot and brought home a dear?"-Detroit Mree

ave_I get mixed up tay's real te-

two-Top they did. - Miles Deb.

into deal last week, Browns-Did yes?

THE DEVIL'S ROOF.

Treacherous Snow That Conceals a Crevasse in the Antarctic "Visitors to Switzerland since can

appreciate the dangers of crevances in the ice sheets. But in the antarctic they are more numerous and attain far greater dimensions that in Switzerland," said L C. Sernacchi, the explorer, to a London Chronicle reporter. They lie hidden under the snow, and very often the explorer does not know that he is on a crevasse until he has traveled some yards, and then he bears n bollow sound the will then wonder whether to go on or turn back, but experience has taught that the greater danger may be incurred by turning back.

"Crevasses are peculiar to the ice sheets over land. They are nonexistent at the north pole because there the ice is a frozen ocean. All antarctic expeditions have had to negotiate the difficulties of crevasses, and sometimes their existence has compelled the explorer to make a detour of many miles.

"Where and juts out into the sea. or, to be more precise, into an ice sheet in the antarctic, several crevasses will be found radiating from this point. Some have been known to he lifty yards wide and 2,000 feet deep instances are also found where a sledge has sunk balfway through the ice roof and has been rescued with the greatest difficulty. In these cases the explorers were luckily roped to the sledge, but they had the uncomfortable experience of being suspended over a

Captain Amundsen calls the treachrous snow which conceals a crevasse "the devil's root," while both the late Captain Scott and Sir Ernest Shackle ton have described it exhaustively.

HITTING THE HYPHEN.

One Would Hardly Think the Little Mark Was So Important.

There is enough energy wasted in placing the hyphen in "to-day," "to night" and "to-morrow" every week day to haul a passenger train around the world. It is claimed there are 200. 000.000 English writing people and that they average to hyphenate there words three times a day. Some may not average to do this more than three times a week and a few perhaps not three times a month; others write those words and place the hyphens in them scores of times each day, especially newspaper men, typewriters, authors. business men, school children and the

The acquiring of sufficient power from making these hypheus each day to prope a passenger train around the world is figured on the basis that it takes haif an onnce of energy to make and more for a typewriter that represents the hyphen, and this would total 2.190,000 pounds of energy, or suffi cient for the train

It takes arrounce of energy to make the hyphen on a typewriting machine and thre to make it on a typesetting machine, and the statistician has figured that typewriting and typesetting machines along take up sufficient energy each day to propel a battleship from New York to the Panama canal.

All these figures were compiled as an argument against using the hyphen in these words. Many people do not, but the majority do. Those who are working toward greater efficiency in everything claim that the hyphen in these words is not at all necessary and should be discontinued by every one, saving a great deal of valuable time and energy.—Philadelphia Ledger.

Mending Eggs. The following is taken from Farm

and Fireside: "During the hatching season last spring I had placed a sitting of fine eggs. A few days before the chicks were due two eggs were accidentally cracked and began to bleed, showing that the chicks were fully developed and alive. I took the eggs from the nest very carefully, melted a little paraffin, and when it was slightly cool I poured it over the broken places of the eggshell, being careful not to cover any more surface than was necessary. "Both the eggs produced fine, healthy

chicks that were raised to maturity."

The Name He Got. In some cases abbreviating a name improves it. In others it doesn't. For instance, the Tubbses thought they were doing honor to the Father of His Country as well as to their firstborn son whom they named George Washington Tubbs.

But when he grew up the handle proved too long, so everybody dropped the George, shortened up the middle name and called him simply Wash Tubbs.—Judge.

Perplexed.

Mabel-Daddy, dear, what am I doing specially on the 14th? I've put red ink around it on the calendar, but I can't remember. Daddy-Won't the knots in your handkerchief help you? Mabel-Oh. I tied those to remember I'd marked the calendar. - London Mail

An Example. a dilw cawa aur delle a bluot mod a spoon? Existen are inanimate, A dish "afiat to der 1 fas-"Cha's eh? How about the cup that beers?"-Easses Off Journal

the Do you Willieve that travel grandens vant We-Well, yes; people wan po-bittens generally agreed themeives-Buites Transcript.

MOVING TOWARD CHINA.

America, It s Said, Is Being Pushed Westward by Ice Pressure.

It may be news to most people that North America has traveled from to rope across the Atlantic to its present position on the glube and that it is still moving toward China. According to the calculations of I're

fessor Wegener of Marburg, Germany North America in the last twenty-six years has moved 295 feet away from Europe, and Greenland in eighty-four years has traveled the appreciable dis tance of 3.083 feet, also away from Europe. Professor Wegener believer that this movement westward is due to surface pressure exerted by he Not only does this pressure force the continent or island upon which it is exerted to sink; but, just as a lot of cakes of ice lying upon each other in a pan of water move the lower strata of the ice cakes sideways, so does surface pressure of ice force an island or even a continent to move sideways. Greenland, so much smaller than the North American continent and loaded down more heavily with ice because of its northern latitude, would move much

ener's computations be correct. If Professor Wegener be right, then it is not merely possible, but probable. that America and Europe were at one time either one and the same continent or so close together that even the rude craft and meager seamanship of the early Hebrews and Phoenicians could carry men and women from one continent to the other.

The average breadth of the Atlantic ocean is about 3,000 miles. Each mile contains 5,280 feet. A simple arithmethical problem gives us the extraordinary result that, supposing North America to have traveled at the same speed in the past as in the present, it took our continent 1,396,000 years to accomplish the journey to its present site. The idea is a fantastic one. It suggests that in about 2,000,000 years. if the present speed be kept up, the Pacific coast of America may bump against Japan and China, thus obliter-World

A HISTORIC BIBLE.

It is Bound in Red Leather and Used In the Supreme Court.

It is a tiny little book, only five and a half inches long and three and a half inches wide. It is bound in bright red morocco leather, with the word "Bible" printed in diminutive gold letters on the back. But one does not see that red morocco cover unless he removes the little black leather slip which procts it. Long. long ago the little red Bible began to show wear, and then the black leather slip was made to protect it—so long ago, in fact, that fif teen of those covers, made to protect the venerated little volume, were worn out in the service.

It is without doubt one of the oldest Bibles, if not the very oldest Bible. connected with the government and is certainly the most historical. It is the book upon which since 1800 every chief justice—with the single exception of Chief Justice Chase-and every member of the supreme court has taken the oath of allegiance when accepting his appointment to our highest tribunal. More than that, every attorney who has practiced before the supreme court since that date, 1800, has pledged his allegiance over the little volume—all, with one exception also, and that exception was Daniel Webster.

It is told even yet of the supreme court of that day that Mr. Webster's fame as an orator had so preceded him that on the occasion when he came to argue his first case before the court the clerk, Mr. Caldwell, in his eagerness to hear the great speaker, forgot to administer the oath.

Unmasked.

"Did you ever stop to think what little things betray one's station in life?" said a woman as she watched the crowd come and go in a restaurant. Two stylishly gowned young women who had just come in had removed their gloves. When they entered everybody took notice. When they took off their gloves they revealed cheap rings on their fingers. Had they worn no jewels there would still have been a doubt as to their position. As it was, their knowledge as to the latest cut in gowns did not make up for their deficiency of taste in the matter of jewels.—New York Sun.

Ears of Animals, The ears of the tigers, foxes, wolves, cats and other beasts of prey bend forward, while the ears of animals of flight, such as hares, rabbits, deer, etc., hend hackward. This is because the ears of beasts of prey are designed for the purpose of collecting sounds in the direction, taken by the animal in pursuit of its prey. The ears of an animal of flight, by turning backyard, enable it to hear the sounds made by a pursuer.

Particular.

"Why don't you want to go to Dr. Goodly's church, dear?" said Mr. Hicks. "Recause I don't care to associate with that class of people," replied Mrs. Hicks. "The last time I went he told them they were all poor, minerable tinners."-St. Louis Post-Dispatch.

Ducy All the Time. "What's the old man doin' now?" "Well, when he sin't votin' around he's applying the diffice, and when there's no classes of gillin' the office be devalue the time to tallful the government here it rought to run Health-Atlanta ony to aspiring talents and industriantion.

MAPLESS REGIONS

An Eighth of the World's Land Surface Still Unexplored.

AREAS WRAPPED IN MYSTERY,

"The Dwelling of the Void" In Arabia Is Supposed to Be the Most Decelute Waste on the Globe-New Guines Has Baffled Countless Expeditions.

It would seem as though this little world of ours should be pretty thoroughly known by this time, yet there are many unexplored territories which have yet to receive the impress of L human foot and which doubtless, like the north and south polar regions, will take their toll of heroic victims from the hardy explorers who first enter their closed portals.

On a rough estimate about 7,000,000 square miles, or one-eighth of the total land surface of the world, are waitmore rapidly than our own continent. ing to be discovered. Some 206,000 as it actually does, if Professor Weg. square miles of this lie in the arctic regions of the north, but among the frozen tracts that form "antarctic" in the south, where Scott and his gallant followers were penetrating, nearly 3,000,000 square miles are relegated ta the sole use of whales, seals, perguins, petrels and other animal and hird inhabitants of frozen homes.

> It is true that human habitations could never be formed in such climes as these, but the scientific world is ever eager for the discoveries of explorers, and even among uninhabited districts their work is never wasted.

In Arabia there exists a tract of unexplored country nearly five times as large as Great Britain. It stretches from Mecca almost to the southeast coast and is called Dahkna, or "the Dwelling of the Void." Probably no more desolate waste is to be found in the globe, for not a single river is estimated to flow throughout its entire-400,000 square miles. Imagine Gerating the Pacific ocean or leaving it many and France combined without merely a chain of lakes.-New York river or stream and you will gain someidea of the parched condition of Dahkna. The Sahara is a blissful retreat

by comparison. Some authorities state that the whole desert is not worth the price of good malacca cane. Others give credence to the legend that treasures and hidden cities lie in the heart of the

Of quite a different character are the enormous mountain fastnesses of South America, which lie along the upper Amazon and in the districts of Colombia and Peru. The celebrated treasure of Cuzco lies secreted among forests, mountain jungles and innumerable fever spreading rivers holds the most intrepid adventurers at bay, to say nothing of carnivorous ants, malignant snakes, water moccasins and those most deadly of serpents, anacondas. During recent years over a dozen expeditions have been either; wholly or partially wiped out in their forts to wrestle with these regions. Mithough the famous El Dorado, which not the sixteenth century ablase, has never been unearthed, the country generally might fittingly be called III Dorado, from the rich minerals and

easionally from the mountains, bringing wonderful fragments with them But they refuse to act as guides to those who would accompany them back. It is curious to realize that vast portens of the British empire have never been seen by British eyes or the eyes of any white men. Nearly a quarter of Australia is still unexplored, mainly

priceless stones emanating therefrom.

Strange, wild eyed men descend oc-

in the west, where the pop 'ation averages only one person in about every twenty square miles. New Guinea has baffled countless expeditions, though many are still trying to fight their way inland from the coast. Despite the fact that the interior of this island is practically a geographical blank, it is neatly divided on the maps between Britain, Germany and Holland. Among its products

are birds of paradise, spices and can-

'Another particularly interesting district which has so far defied civilization lies secreted among the Himalaya, mountains. Rumor accounts that it is presided over by women, who are responsible for such rude laws as are necessary even in a lawless district. manage the affairs of state and live in a luxury of inverted Mormonism by possessing four or five husbands apiece. To the hill men are relegated all the rough tasks and menial labors. "Mereman" is of small account beside these Himalayan amazons. But we may assume that in due season the men will

rise to claim their vote. The foregoing selection does not exhaust by any means the list of geographical blanks waiting to be filled. Before the atlas complete can lie on. our shelves we must penetrate the darker haunts of Borneo, North America, the Kongo basin, the 700 miles mountain range that stretches from Der Fur into the heart of Sahara and numerous other spaces.—London An-

members at Quite, under the equ in Brundor, that persons dressed in white have been distinguished seven took miles sweet. Orientesbests-Status to place for a man to eve ble to

"Wie bacriers are not erected that can