Various Substitutes Chasing the Favorite of Centuries from the Field.

Bubber, Metal, Glass, Pasteboard and Pulp Among the New Coverings-Fortunes Made Out of Some Devices

The man who made the discovery many long years ago that a little tapered cylinder of cork was the very best bottle stopper has only been exceeded as a practical tury, have set themselves to work to improve upon and undo this early invention and to get upon the market anything else than a "cork." On both hands, relates the cesses, the cork people having by improved is still today nothing cheaper for the closing of a bottle; the patent stopper men for their part, having shut off avenue after solutely control certain lines of trade.

Yet the beginning of the end may almost darkly." After five centuries of use the corkclosing bottles are passing, slowly and with York is the case of one man who shrewdly between \$4,000,000 and \$5,000,000.

What gives the inventor his hopes of making a "strike" on some stopper or other is the fickleness of the makers and purveyors cheap and practicable. It is the exception when any bottle-closing device has the field for any length of time. Unices it has unout very quickly in favor of another patent. Patent Stoppers.

shortest lease of life makes one of these very simple and effective. patents profitable and worth many hours of

Washington, an incredible number of applihave aroused the inventive genius of the opened. average American more, almost, than any other class of articles. What he invents in response to the demand is frequently curious, always ingenious, seldom simple enough to manufacture and to use for the trade to take it up. Yet, undiscouraged,

PASSING OF CORK STOPPERS other glass stopper, these are only for the high-class drug or perfume trade. Among the Brewers.

Since the beer manufacturer uses his bottles over and over again the question of patent stopper at once appealed to him. PROFITABLE PATENTS, BUT SHORT-LIVED rapid changes of fashion in these, and a bay every day. The tall office buildings end of this wire hangs a twenty-five-pound stopper that has been a success in this great structures sway just as surely as the English success has made no way here. cause is not far to seek, for it is the action Why this has been so no one can say, but of the sun itself.

it stands as a fact. ery nearly \$5,000,000 in turning out a cer- of the tall structures, whether built of a monopoly of that field while the patent genius by those who, within the past cen- and, with its price run down, had a large beight of its success the man who had control of it was offered \$25,000 for the Engmachinery reduced their price so that there | To his surprise and chagrin the stopper never sold at all in British territory. The of closed out. England took so little to what avenue for the use of corks, coming to ab- had for years been the greatest American beer stopper that the manufacturer not only lost the \$25,000 he could have secured, certainly be seen "as though a glass, but quite as much more, in trying to build up the trade.

The beer and soda stopper patents have many an effort to hold their own, but pass- been legion. Every sort of mechanical deing nevertheless. Rubber, metal, glass, vice and principle has been applied to them. pasteboard and pulp are the new coverings the only practical restriction being that of the day that here and there are taking whatever it is it shall be simple to operate the cork's place. There are financial re- and inexpensive to make. To these another wards almost beyond the bounds of the might be added-that it shall be of a mechimagination for the inventor who hits the anism that shall not get out of order easily. popular taste for a cork substitute, or if The mechanism of the day, and this is not not for the inventor, at least for the lucky alone for sods and beer bottles, but also manufacturer who manages to lease good for milk and now coming into use for fruit stopper patent rights. In down-town New jars, is the eccentric, in which a double wire loosely clasping the neck of the botsaw the value of one stopper patent, bought the when pushed up, raises the stopper up the right to manufacture, and before cleanly and easily. Until recently this the patent had run out cleared in profits stopper was made of metal and rubber. A recent improvement is to have its top of porcelain and its bottom, where the liquid touches it, also a porcelain tip.

A stopper that was famous in its dayof certain liquids, milk and beer, for ex- | and its day, it may be said, is by no means ample, and the like uneasiness on the part over yet—was a glass ball fitted firmly in of people who put up fruit, all of whom the bottle's neck, held tight as a drum there will gladly and speedily desert their old by the gas inside. A sharp, quick poke or favorite stoppers for any good new thing punch with a stick or rod forced the glass that appears on the market, provided it is ball in with a report and the bottle was open. Another stopper had a rubber disk raised by a tinned wire twisted into a usual strength and excellence it is elbowed good spring. A newer one has a simple tin cap that fits tightly over the bottle's top and can be readily pried off with a penknife blade. An aluminum disk with a cork gas-But such is the demand that even the ket over the top is yet a further device,

Stoppers grow simpler, more easy to handle and more artistic in design each year. Thus bottle stoppers have come to be one in 1861 the first patent fruit jar with a of the chief cries at the Patent Office in glass top was invented. It was known as of business and sundry professions. Weman peach, as that would be hard on the poets." cations having been received for these de- time. The cooling off of the hot fruit tender consideration and courteous attenvices, a mighty number of patents having sealed the top and made the jar airtight. been issued in the last few years. The sim- A knife point inserted under the top broke ple, insignificant little fastenings seem to the seal and the jar could then be easily

HEART-BEATS OF A LIFETIME.

At the Age of Three Score They Run Into the Billions.

bottle manufacturer. They are the cleve devices that have gained patents, but are deviced with absolute accuracy, but one devices that have gained patents, but are deviced with absolute accuracy, but one devices the proposition, finds that they have been an extended with absolute accuracy, but one find the patents are the proposition of the patents and they have been an extended with absolute accuracy, but one find the patents are the patents and they have been an extended with absolute accuracy, but one find the patents are also do not beat at the same rate of speed, and cately either will cost too much to make—that their they are also prove too complicated for the general proposes momentarily the requestive speed, an cactel, errate sort of futtering generally referred to as palpits or produce the opposite effect in a quick prove too complicated for the general public. Some of these devices, indeed, are so clever that it seems a pity they must be lost to the world or wait for a problematical simplifying. Yet this is what one sees in these bottle graveyards.

It is when one gets a glance over the patent records in one of those lofts that he comes to realize fully what a remarkable fascination devices for the closing of the patent records in one of those lofts that he comes to realize fully what a remarkable fascination devices for the closing of the patent records in one of those lofts that he comes to realize fully what a remarkable fascination devices for the closing of the patent records in one of those lofts that he comes to realize fully what a remarkable fascination devices for the closing of the patent fastens indeed if some of these hundreds of devices did not prove formidable rivals for the simple little cork. And this is just what has been the outcome. Proportionately, as the years go on the cork of cork becomes less and less a factor in the bottle trade. More of less and to patent fasteness, caps, and tops increases at a far greater ratio. Full tars have long since have been continued to the patent f

## Lean Toward the Sun

and very many of the stopper patents of true, that the great arm of the Statue of country has failed in England, and every earth turns once in twenty-four hours. The One thing which would have made the

tain famous beer bottle stopper, held almost metal or stone, to move around in mid-air under the action of heat or cold. It is rights lasted, and after the patent had run pointed out that the "tallest skyscraper"out it was manufactured on every hand, the mile-high office building-would, after it had been erected a certain distance into sale for a long time thereafter. At the the air, turn over like the lash of a carriage whip, due partly to the impossibility of making it rigid enough. But saids from lish rights. He emphatically refused the this, even were the architect able to con-New York Times, there have been suc- proposition and shortly afterward sailed to struct an iron shaft or the quarry-England himself to manufacture it there, nan able to erect a stone shaft in one solid piece a mile high, the top that shaft would nod its head English plant was a failure and was soon slightly at the sun just as surely as the more flexible sunflower does now each day. For all tall structures move, skyserspers, church steeples, monuments and tall towers bend over or follow the sun around in a circle each day. All bridges slide forward and back on hot and cold days. The Brooklyn bridge has indeed a buckling plate in its center, which is intended to take up the sliding motion that constantly goes on in the structure. This movement of bridges is of railway tracks, which contract in cold and expand in hot weather, sometimes to the extent of 420 millimeters to the rail. stantly which has moved its position perceptibly in a century. St. Paul's cathedral, in London. be sliding slowly into the Thames.

The Washington monument on the bank

monument, of course, is bollow, and 141 says he was able within certain limits to the past ten or fifteen years have been Liberty in New York harbor beckons a wel- feet up the inside in one of the corners ex- tell the time of day by the position of the directed toward the brewers. There are come to the steamers that come up the tends a wire, hung from a beam. On the curious phase of the stopper question, espe. bend their heads and the big Brooklyn plumb-bob made of brase. It just clears cially as applied to beer bottles, is that bridge lifts itself up and lets itself down the floor. On a platform nearby is affixed for the past quarter of a century every every day, for all tall towers move and a spyglass, the objective of which has a vertical line scratched upon it. The glass is affixed to a graduated scale and may be moved forward and back by means of a thumb screw. Under normal conditions the The manufacturer in New York who made Tower of Babel impossible is the tendency through it the long wire with the plumbspyglass is adjusted so that if you look bob on the end will be directly opposite the vertical line scratched on the objective On hot days the top of the monument leans over and, of course, the plumb-bob swings over with it like a pendulum. By adjusting the glass until the two lines are directly opposite again the graduated scale immediately shows how great a movement has taken place. It is calculated that this leaning has been at times as great as four

> The dome of the capitol building in Washington has an elliptical movement, towers and statues and bridges, and even and an experiment was tried to show its with the tall office buildings. No experiscope. A wire was hung from the middle ments have been made with sky-scrapers of the dome inside the building, extending as yet, but they move just as surely as down to the floor of the rotunda, and on do the other structures. The movement the lower end of the wire was hung a of St. Paul's bodily toward the Thames plumb-bob similar to the one in the Washington monument. But in the lower point of the weight was inserted a lead pencil. The point of the pencil just touched the caution, it was noticed that the great somewhat on the principle of the creeping ... upon the floor. Every day as the dome moved it dragged the pencil over the paper. The mark made was in the form of an etlipse six inches long. The dome would There is on the banks of the Missouri river start moving in the morning as soon as wast quantities of sand which are con- the rays of the sun began to act upon it. in motion. Of course, glaciers and slowly, as the day advanced, the pencil move, and there is a mountain in France would be dragged in a curve across the paper until sundown, when a reaction would take place and the pencil would move back toward the river. In this, of course, there not only has a tower that moves back and again to its starting point. But it would forth, but the building itself is thought to not go back over its own penciled track, for the cool air of night would cause the dome to contract as much on the one side as the sun had made it expand on the other, of the Potomac is so noted for nodding its and so the pencil would form the other half head at the sun that the engineers have of the ellipse, getting back to the start- absolutely rigid. erected apparatus in the structure to show ing point already to start out again at

> It may sound fanciful, yet it is literally just how much it may go out of plumb. The suprise. One of the guides in the building pencil on the paper, and it is easy to imagine a clock, the face of which would be the ellipse with the figures drawn in their places and the hand of which would be the plumb-bob hanging on the wire and pointing to the time of day.

Variations Noted in

Lofty Structures.

The Philadelphia city hall, which is higher than the Washington monument, leans a trifle every day, and the Eiffel tower, in Paris, insisted on meving in curves and leaning so much that it once got upon the nerves of the excitable Parisian public. They thought it might Colonel Basset of the French army, who made the tests of the tower's movements, found that the expansion and contraction of the iron in the tower causes it to describe a torsion movement between sunrise and sunset, which traverses a curve of ten centimeters. Of course, a backward movement equally as great occurs during the night.

So it is with all the other domes and is due to the subsidence of the sub-soil the days of Wren, who took every pre-A large sheet of paper was spread weight of the building had disturbed the ground a little. One hundred years ago the building was braced with iron ties. Yet the drainage that has taken place and the tappings of the underground railroad have weakened the condition of the neighboring ground. The south transept has begun to slide southward and one great wall nearly ten feet thick and 130 fee wide has opened and started to alide is danger, but there is no danger in the movements of towers, for the expansion due to heat and the contraction due to cold is a very natural condition and one that must always be taken into account by the architects. No great tower could possibly be

THEODORE WATERS.

## Is Gallantry Declining? Women Themselves Declare It is Not.

another, who made this answer: I am off of the old-time chivalrous treatment of "atmospheric." and was a noted jar in its as a bread-winner can never evoke that tion that were hers in the olden days, when do tell us that it made them very wears, she did not go forth into the busy world but the modern chivalry is of a different and hustle for a living.

They themselves would be the first to see he—or someone else—continues.

Interesting and strange novelties, caps, fasteners, stoppers, crowd some table or some closet shelf in the office of every big bottle manufacturer. They are the clever devices that have gained patents, but are not quite practical successes. Probably the and all that sort of stuff. The women of all that saves you."

the full guardianship of the children and pathy of a mutual understanding of the gentleman.

men to women so greatly declined?" was let you work for wages, because that would recently asked by one well known man of not be chivalrous, but if you insist on doing it we will collect and spend them in order to spare you the trouble. Don't slide down satisfied that the main cause of the falling from that pedestal where we have placed you, well out of the way. Be very careful woman is due to her having entered into not to do anything which will brush the active competition with man in many lines bloom from the grape, the down from the All this might have answered for our grandmothers, although the dear old ladies

stamp. It says to woman: "We have been From the women's point of view there is tyrants and usurpers for ages; we are quite as much gallantry as there ever was ashamed of the way our sex has wronged and it is of a much more desirable quality. You in the past, but we will do all we can in reparation. Come with us and receive and resent a decline in this respect, but the highest education; control your own those of the present generation have a property as we control ours; share with us women most need "tender consideration and proud and happy consciousness that never the guardianship of your children and ours; And so men and women study and toll

today would laugh in their faces and say; and take their recreation together, mark "Oh, run along and be brutes, if this is you, for there never was a time in all the so for women, and the man who has a spark world's history when there was so much The "gallautry" of the present does not companionship and sympathy between them. consist, as it did in the past, in saying to It is not that sentimental sympathy which women: "Dear little delicate creatures, made a man kind and forbearing toward a upon the favored women of his own social don't bother your heads about getting an woman because she was weak and inferior, education; we like you better without it; or which caused her to be tolerant and we are your natural protectors; we will considerate toward him, because it was take all of your property because it would only thus that he could be saved from his be such a burden for you; we will assume own vicious tendencies, but it is the sym- unworthy to be called by the name of

conditions which shape the life of both such a one as can come only through close comradeship.

If a woman must choose between justice and chivalry she will prefer justice, but the man who is great and good enough to be just may be trusted also to be chivalrous The form of the chivalry may change, the spirit is indestructible. Consider for a moment another sentence in this interview which is used for a text only because it is the common expression of those who are opposed to the new regime of womanhood:

Woman as a bread-winner can never evoke that tender consideration and courteous attention which were hers in the olden days, when she did not go forth into the busy world and hustle for a living."

Does not every man in America blush when he reads that sentence? When do courteous attention?" Is it when they are themselves and those depending upon them The struggle is hard for men: it is doubly to these toiling wagecarners even more courtesy and consideration than he bestows circle, who are living in ease by the sweat of somebody else's brow. The failure to do IDA HUSTED HARPER.

LONG DISTANCE WEEPING.

valleys of the Ammonoosuc and Androscog-gin on the north. Connected with it east-erly are the great forest areas of Maine, extending to the Canadian frontier, and en the west are the contiguous mountain dis-tricts of Vermont.

the west are the contiguous mountain districts of Vermont.

This whole section, including parts of the three states named, is of the highest scenic interest, comprising mountain, lake and river. Dominated by Mount Washington and the Presidential range, flanked by the Franconia and Sandwich ranges, it includes also groups of lesser peaks covered by forcests, inclosing mountain-walled lakes of surpassing beauty, feeding the Connecticut and Merrimac rivers, the Saco, the Androscoggin, the Kennebec, the Penobscot and many tributary streams, the source of the water power of hundreds of manufacturing villages and cities, to which the growth and prosperity of New England are so largely due.

It is a region of great historic interest, closely associated with the past and present life of New England, interwoven with its romance, poetry, art and tradition. The territory is easily accessible from every point, and available to a large percentage of our urban population. The eastern section is well stocked with fish and game, and other parts might under proper conditions be restocked. Each year, however, marks the cutting for commercial purposes of many acres of its forcest growth, and the encroachment upon its borders of the expanding life of the towns is constantly more obvious.

HOG-RIPENED WHISKY.

n Old-Time Tavern Keeper Who Knew How to Advertise. There are but few people who can be

stited into the neck a shell of cork, and store this a glass stopper goes. The liquid swells the cork shell slightly, and the glass stopper thus fit in tightly, needing several triats when the contents are wanted. Today where the old cork holds its favor is where the bottle whose contents it protects is kept only until emptied. New cerk-cutting machinery turns out corks of cork and white. With patent medicines and with the greater percentage of drugs this is the case. But for bottles and adopted the glass stopper has come into vogue. Something that is not generally known is that with ground glass bottles and stopper person stopper can ever fit the neck of any other bottle than that one it was originally made for. The tiny ridges and channels in the neck and stopper face fit together as do the parts of a complicated lock. The primitive bottle, made of glass just at the class of the middle ages, had at first the cles nduced to believe that there ever was such a drink as "hogeripened whisky," relates

Costly Consolation for Foster Sisters. A very affecting incident occurred in this

A very affecting incident occurred in this city a few days ago, relates the Portland Oregonian, which incidentally proved expensive to the man who brought it about. A number of years ago two little girls in this city were left orphans, and though in no way related, were by chance brought up and kindly cared for by the same person. A strong affection grew up between that two girls, which was warmer from the fact that neither had any parents or brothers or sisters to lavish their affections upon, and their love grew and strengthened as they came to womanhood. Finally some turn of the wheel of fortune separated them. One remained in Portland and in due time was happily married. The other went away "up country" and finally was also happily married. An intimate correspondence was kept up between the two for a few years, but was finally dropped owing to changes of location, and years passed without either seeing or hearing of the other. A short time ago the one living in Portland heard that the other, with her husband, had taken up her residence in a town only 100 miles or so from this city. A great desire to see the old and dear triand came over her, and she could not eat or sleep on account of it. Circumstances rendering it impracticable that she should go on a journey at the time her husband auggested that she have a talk with her friend over the long-distance telephone.

He rang up the distant city and called for his wife's friend, and after a reasonable time was notified that she was at the phone. He then called his wife to talk to her, and the following conversation took place:

"Its that you, Saude?"

her, and the following conversation took place:
"Is that you, Sadie?"
"Yes, is that you, Susie?"
"Yes."
Then both began crying for joy and kept it up for half an hour or more, without being able to say a word. The unfortunate man who had arranged the interview, seeing that his bill was mounting into the hundreds and bid fair to continue to mount indefinitely, called it off for the time and the two friends continued to cry without expense. A meeting between the two friends has been arranged for, as neither of their husbands is willing to take the chances of financial ruin by allowing them to tackle the long-distance telephone again.

MOORISH CHIEF IS SCOTCH.

and a slight outbreak was quickly suppressed by Maclean's admirably disciplined soldiers.

The new sultan being only 13 years old, a regent was necessary and Ben Mussa was appointed, with Kaid Maclean's influence, power and hand behind him. Any inciplent opposition which broke out was suppressed with a strong hand, as all risings of tribes have been, notably that of the Misfiwa tribe a few years ago. To prevent if possible the recurrence of such incidents the heads of fifty prominent Misfiwa tribesmen figure on spikes over the city gates of the port of Rabat and a similar number adorn the gates at Fez. Maclean always leads the punitive expedition himself and has thus seen much tribal fighting. On the death of Ben Mussa last year the sultan took up the reins of government. Kaid Maclean still retaining his predominant influence.

The Moorish commander-in-chief, by long residence in Morocco, has now become a "Moor of the Moors." He is sun-darkened and swarthy in complexion and wears the picturesque costume of the native kaid. His protracted absence from his native country has been broken by periodical visits to Scotland and the music of the barbaric war slogan of the Gael, the bagpipes, of which he is much among the Moroccan mountains as among the bens of the Highlands, the kaid having succeeded in introducing the instrument to his adopted country. The young suitan, indeed, enjoys the skirling of the pipes as thoroughly as the Highland clan stories which his commender-in-chief can tell with genuine Celtic fervor and humor.

The kaid, whose full name is Harry Aubrey De Vere Maclean is a C. M. G. and

can tell with genuine Ceitic fervor and humor.

The kaid, whose full name is Harry Aubrey De Vere Maclean, is a C. M. G. and is 51 years of age. He is married and has three daughters and one son living. At Fez and Marakesh the family live in palaces of oriental magnificence. The army over which this intrepid Scotsman is the commander-in-chief comprise about 20,000 men and is equipped with European rifles.

HOUR GLASSES .. DEMAND.

"Most people think that hour glasses

Many Purposes for Which They Are Superior to Watches.

went out of style years ago," said a cierk in a jewelry store to a New York Sun reporter, "along with perukes and knee breeches, but as a matter of fact we have Mas Risen to the Command of the Army of Morocco by His Abitity.

Great honors were shown in England recently to Kald Maclean, commander-in-chief of the army of Morocco, when he visited that country to pay his respects to King Edward. The general is a native of Scotland and a member of the Clan Maclean, which in times past took part in many fends and lowland forays. Entering the British army some thirty years ago he saw fighting during the Red river expedition. When Mulai Hassan, the suitan of Morocco, decided to reorganize his army he applied to England for a drillmaster and Keld Maclean received the appointment. Soon after his arrival among the Moors he won the suitan's confidence and became not only the commander-in-chief of Sherefian army, but the trusted adviser of the late ruler. He reorganized the army and his daring deeds in battle impressed the natives go much that he practically held the nomination to the throne on the death of Mulai Hassan, although the grand vicer, Ahmad Ben Mussa, also possessed much influences. The suitan's brother was ready to saits the suitan died within two days march from Marakesh they had the body continued the death and had Mulei Hassan's sent leading the frome, but as Kald Maclean and Ben Mussa were the only persons present when the suitan died within two days march from Marakesh they had the body continued the death and had Mulei Hassen's sent line for them this tast ten years. That this renewed popularity of the hour simplece by the coming generation I am not prepared to say, but if such a remailer to say but if such a remailer to say, but if such a remailer to say but if such a remailer to say, but if such a remailer to say but if such a remailer t more calls for them today than we have



Began Publication Nov. 3, in The Sunday Bee.

# "No Other Way"

Sir Walter Besant

The Last Work of This Gifted Writer.

Powerful and Dramatic Story. Unique in Plot.

T is founded on a most peculiar condition of the English penal ystem and debtor's prison. The heroine, a beautiful young widow, is in imminent danger of being thrown into a debtor's cell when a crafty creditor shows her how, by marrying a condemned criminal, she can escape her debts, and as he will soon be executed, she will also escape the ignominy of this su repti-

With this curious introduction into a plot unique in fiction. Sir Walter Besant enlists the sympathy of the reader and arouses the keenest curiosity in the final outcome of the strange alliance. Contrary to expectations, the criminal does not die, and the efforts of the heroine to escape her husband, together with the cremostances of a change of fortune which has come to her gives a swing to the tale and a rapidity of action and development which ends only with the last chapter of the story.

Began Publication November 3, and runs 16 weeks. Illustrated.



Judge (facetiously)—Then I guess we'll have to do it with a rope. Prisoner (sotto-voce) He's stringing me.



Country Receiver-Pull ctop, sir! Full crep!