

mony of the Wisper, who followed him a century later. I might be the foreman of your father, and do this great work, if I was not a soldier. But I have learned nothing since I left home, save to play (and your mother says divinely) on the Stradivarius violin, that, with the Amati, was used by my ancestors in testing the bell tones."

This was all so sad to Gretchen that she began to weep, as she stood over the clear water.

Now, there is a secret that Herr Von Wagner must have at once before he composes again. It is the Undine spell of the Rhine, and it must be worked by a lovely German girl on her sixteenth birthday, at exactly half past 8 o'clock on the eve of the 19th of October. She must have long yellow hair—not too wavy, and the god Wodan, who has ten arms and fifty fingers, does not like it *banged*. This pale gold hair must be tied in a knot with a blue ribbon, like the German skies, and one shade lighter than her violet eyes. Her cheeks must be rosy—not red—and she must have white, even teeth, and a sweet smile when happy. Weeping must not affect her nose, and she must weep seven tears as she lets her hand rest on the sleeve of the soldier, and her name must be Gretchen, the pearl. No other maiden need ever try.

This is the reason that the instant the little sob followed the seventh tear in the water, that seven lovely Rhine maidens, led by the Lurlei—as if afraid she would shed the eighth tear and spoil her nose—arose from the water and held out their hands and sang:

Come maid and lover of the earth,  
Find help in German water;  
The river of your Fatherland  
Is kinder than you thought her.

The young girl thought it would take the starch out of her white Swiss dress, and the young man thought he would be reprimanded for going into the water when the Emperor was expected, and in his best uniform, too. But they were so sorry for themselves that they leaped in at once. Three Undines supported each, while the Lurlei led the way and they all breathed water. It is ungraceful to drown before the one you love, and so neither did so.

Now there are silver, copper and lead mines on the Rhine, almost just where Bishop Hatto burned his parishioners in the barn, and said: "Hear the rats squeal," and below the lurid top of the Mausethurn tower where the rats ate through his walls to the moat, and ate him alive. There is the holy well of St. Hildegrade, that cures soul and body; and near where Rhine and Nahe unite at Bingen, where a wife of Carlo Magna sleeps, there is the Johannisberger vineyard, the wine of which is good for sorrow. This is the only way I know of to account for what happened, for the Valley of the Fairy Grasshopper is miles away.

They were right under the Lurlei rock, all of whose voices were still, and the gold and silver of the under world had overflowed into the vast cavern where they were, and upon the walls and floor, and roof of white crystalline quartz. Thus the walls were rock crystal and the long ago molten silver had made cascades of the metal down it; some of it oxidized and some bright. Then the gold had overflowed from the Golden Age into the recent Silver, and lay upon it in the most fantastic devices. So it was that both metals, with the grotto arches, made cathedrals and statues, market-places and towns, vineyards of silver leaves and golden grapes, figures of maidens dancing, with crystal faces and gold and silver dresses, and of angels flying and of little children playing. One darling baby in silver, in a golden cradle, was just what Gretchen thought she could have if she—and then she blushed.

The Lurlei said they could walk now, and led them through a vineyard and places full of the supplies of all human needs, to the machine shop of the Gnomes. It was just like the one Gretchen's father had, only there was water mixed with sunshine for fire, and white quartz for the black walls, and beams of silver and machinery of gold, and lovely Rhine girls in long sea green and fiver blue dresses, and yellow hair, for workmen, where they had turned the little black Gnomes out, and a few other variations, which did not strike Gretchen as spoiling the likeness. But the interest lay in the variety of bells modeled in pure gold and silver, which were the original patterns of the Lurlei for all the famous bells of the world. There was the Santa Maria of Carl the Bold, given to Antwerp in 1467, weighing four and one-half tons. The Carolus of Charles the V., which he cast of copper, silver and gold, at a cost of £20,000 English money, because the seven one-half tons could not be got in all silver or gold. And there was the great Holy-Ghost bell, of Strasburg, dated Aug. 3, 1375. There was the Vienna bell, of seventeen tons, with three fellows, the Great Peter, of York Minister, England, of ten tons; the Big Ben of Westminster Parliament House, of fourteen tons, the Cologne Kaiserglocke, of twenty-five tons, and the ringing Moscow Bell, of 125 tons. The Lurlei kept her private office and cash book in a model for the Tzar Kolokol, of Moscow, the un-hung father of bells, made of 440,000 pound avoirdupois. All these were in fairy gold and silver.

She said to Everard and Gretchen: "We will now call in the Gnomes, and show you how to cast the Emperor 'C' bell, and to get married." The following was her first prescription:

Four parts of copper to one of tin,  
Is the rule your father gave the world;  
But another secret, told no man,  
Under the clapper was safely curled,

When the bronze is one-third gold and silver,  
The tone is noble, pure and fine;  
Height to diameter, twelve to fifteen,  
And the music is then divine.

He was much impressed, but said if she could conveniently give her information in prose he could keep it better.

She said she would try, but it was very difficult, especially as the Gnomes might catch the idea, which they would find all Dutch, if put in verse. They worked as she talked, and put in the furnace crucible just the copper, gold and silver needed for the "C" bell to complete the chime. She said: "In conformity to the laws of acoustics, the number of the variations of a bell, varies in *inverse* ratio to its diameter. So, in a series forming a complete octave (8 bells), the diameters go on increasing with the depth of tone. For instance, for *do*, one; for *re*, eight-ninths; *mi*, four-fifths; *fa*, three-fourths; *sol*, two-thirds; *la*, three-fifths; *si*, eight-fifteenths; *do*, one-half. For a peal of bells to give the pure chord of the ground or key note—third, fifth and octave—the diameters are required to be as thirty, twenty-four, twenty, fifteen, and the weights as eighty, forty one, twenty-four and ten.

Gretchen fell to working sums in proportion, and felt as if she was back to school and in peril of a switching.

The Lurlei then took the table of the weights and shapes of the bells of Our Lady of Oberwesel, and began to calculate; also to give orders to the attendant Gnomes. She said: "The thickness of the bell's edge or rim is 1.15 of its diameter, and its height is twelve times its thickness. This, that men had to learn in four thousand years, the Rhine maidens always knew, for they are themselves belles. The trumpet mouth is only of the sixteenth century as a settled principle, but it is only less ancient than rams' horns, which the stone of Jericho could not stand." She took from the Tzar Kolokol a curiously shaped compass of olive wood, the inner leg of which is the shape of the inside of the bell, and the other of the outer. The Gnomes were now working on human model, and had built a form of brick about a central stake. Upon this, they placed coarse clay, mixed with loam, until the inside of the bell was made, as directed by the sweep of the inner compass leg. A Yankee Gnome called Meneely, here made a suggestion, which was adopted. He said: "All metal shrinks in cooling. Let us wind a rope of dry straw around the brick core, and finish the core with clay and oil on that. As the straw slowly burns in the molten heat, the contraction will cause no cracks. Also let us leave frequent holes in the core for the oily gas and smoke to escape, and so make no bubbles in the metal."

This, the Lurlei said, was informing the Rhine. When the false bell, made of fine clay and calves' hair, to make it cohere, was on; the inscription of dedication to the Emperor, the date, and a motto in Latin, "Puero Gladium," as a compliment to the aged defender of the Rhine, was put on in wax. "This," said the Lurlei, "is the only way to keep the letters from sticking in the cope or mantle outside. But now they will go off slowly in gas, and the bell be perfect." The clay mantle, with a fine surface like the cope, was then put on. The furnace of sunbeams in the water lens was then supplied with a blast that re-used the sunbeams at double intensity, and the whole was baked together. It was from the Lurlei Spirits that civilized people learned to cook with water. Savages will use the dry roast.

The mantle was now taken off, the false bell broken, and the mould between the core and the cope was at last ready for the true bell. It was seen by the fairy slate that two thousand pounds of copper, five hundred of gold and five hundred of silver was the proportion for the Emperor bell. Gretchen asked, timidly, "If the bell is to be 'E,' and only metal enough for an 'F' or smaller bell be cast of the same height and diameter as the 'E,' but more thin, what will be the result?"

She said, "The metallic weight or thickness must be in proportion to the calibre, or the tone will be puny and poor. It will be only a brass pan."

The lens of water, mingled with sunbeams—taken from the other side of the world, as it was now night in Germany—soon melted the metal, and it was poured into the mold. Undine turned it in from the tap or in great ladles, as all things are light in water, save darkness, that is—do not weigh so much. The Lurlei said, "A bell of this size should take six weeks to cool, and even then the metal is still crystallizing, and must not be struck for some time. But a bell cast in water is already cold. Take it out to tone."

One-half of the work is done,  
When you have proportion found,  
But we have to test the real work,  
In order to know the sound.  
One-third of the metal is precious,  
That rings in a fine bronze bell.  
Now strike as you draw your violin bow,  
And see that you tone it well.

He did not think so much of her poetry as of her work, but his own Stradivarius violin was given him by a pretty girl in green gauze, that showed her embroidered underclothes as she floated by him. A golden hammer was given to Gretchen, and he tuned his violin, and drew note after note of the octave.

She said in prose—at his special request—"The one note of a bell is its consonant, and this is true or false. Try the bell on the curve at the top."

Gretchen did so and it yielded a note just an octave above the consonant. Tap it just one-quarter distant from the top," said the Lurlei.

She did so, and it gave the *quint* or fifth of the octave.

"Two quarters and a half (or eighth) lower," was indicated and it gave the *terce* or third of the octave.

The Lurlei smiled. "Now strike hard on the clapper well above the rim," she said.

Gretchen did so, and in unison with the violin the *quint*, *terce* and the *octave* all sounded at once. The Fairy of the Rhine then bade the Undines to strike the models in silver, of the other bells of the Oberwesel, that lay about the floor. They did so, and as they rang the "A," the "B" Gretchen struck the "C" on the Emperor, and the "D" then followed in the quartet.

Four bells ring twenty-four changes. Five bells ring one hundred and twenty. Twelve bells, at two strokes a minute, take ninety-one years to exhaust their changes. Twenty four bells take one hundred and seventeen billions of years ring out. It is at the end of this Lurlei chime that the Germans are to cease to love the Rhine.

Everard began to tell how to cure a sharp *terce*, which can be flattened by filing or turning inside of where the *terce* is struck, and how the consonant can be sharpened by turning inside the rim, and flattened by filing inside above the rim at the swell.

The Lurlei said, "There is no cure for a flat *terce*, but a bell should be true when cast. There is nothing false about the Rhine, and this is a maiden bell. You will find no wavering of from a tone to a half tone below the consonant, as in a sharp or a flat *terce*."

She then gave him the leaf of a water-lily, written in excellent-German, with all directions for work in bronze, and added:

"Now you can marry,  
Now you can play,  
And sing to your babies,  
All the long day."

The young man said, "I am still only a poor soldier of the Fatherland, if I go back."

She laughed and they all sang,

"Our Fatherland has wine enough,  
Oh, drink to our sons who guard the Rhine;  
Our Fatherland has gold enough,  
Oh, give to our sons who guard the Rhine."

And instantly, ten gnomes, loaded down with gold and silver, signified that they were only waiting to go with him to the barracks.

"If you will only keep it for me until I get a house and my discharge," he began, and they promised to do so.

The Lurlei maidens then ordered the Napoleon statue to be put back in its place, so that France might have no more cause to put blood in the Rhine, and promised that the bell should be ready to cast in the foundry when the Emperor should come on the morrow. Then they sang,

"Farewell mortals, pleasant dreams,  
Come from where Rhine water gleams."

In the twinkling of a moonbeam he was safe and dry with Gretchen on the bank, and her dress was freshly laundered, and his belt newly chalked.

The next morning at ten A. M. he was on parade and was one of ten to go with the Emperor inside the foundry. The Herr Adolphus had his copper melted, but did not know what tin to put it in, and his mold was not ready, as he said his foreman had not come.

"Here he is," said Everard, and the Emperor pulled his moustache and looked at Gen. Von Moltke, as the young man put off his coat and began work.

Two Gnomes, each with the gold and silver needed, came in the right time, and he found out the weight of the copper.

He did all he had seen done, and the Emperor dined and wine and came again to see his skill. The core and cope were baked, the metal poured in by Gretchen's own hand opening the sluice, and the "C" bell was cast.

In two months it was cold and the metal crystals all firm, and the Emperor came to hear it toned. You may be sure that the Pastor had tested it the night before (as the picture shows you.)

It was true and noble, and when it rang with the others in the tower, never had the Rhinegau heard such music, and the Lorley rocks caught the far sound and gave a thousand echoes.

The young man thought its tones clearer and finer than the bugle tones that arose on the morning air, pure, prolonged and articulate as a seraph solo, and the young girl, who had always thought about the accompaniment need for God's sermon at the pulpit of the Angels, she, Gretchen, had a dream. She thought the Emperor was delighted, and gave her father the collar of the Black Eagle, and to her lover his discharge and a fine salary at the Royal Foundry at Potsdam or some other place where they have one.

Then she went up in the bell tower, and when the "C" bell rang such golden and silvery tones that even royal eyes grew dim, suddenly it had a wreath about it in the air; nob of flowers but of fairies. Their little bodices were of carven pearls, and their robes, shone as if cut from rubies, diamonds, sapphires and emeralds, as they probably were, and it was tany who swung the bells by gossamer threads and smiled, and threw an Elf in veil of lace over her, and pelted her with orange buds as they sang:

Maiden whom the Lurlei love,  
Gretchen from beneath the Rhine,  
Take the bridal veil we give,  
Have the bridal wreath entwined.

And she is kissing a baby of milk and roses at this very minute, and it was all true.

## GOLDSBORO'S ENGLISH REMEDY.

For Rheumatism, Neuralgia, Indigestion, Dyspepsia, Liver and Kidney Complaints, &c.

The above complaints arise chiefly from the failure of the Liver, Kidneys and Stomach to properly utilize solid and liquid food and to enrich and purify the blood, which is the nourisher of the whole system, and upon whose healthy condition depends power to resist and defeat attacks of disease from whatever source. The miseries of Rheumatism and Neuralgia, Dyspepsia, Indigestion and Kidney Diseases, are unfortunately too common. For instance, there may be a pain in the chest, general dull bodily pain; lassitude and depression; sinking and rejection of food; oppression, water-brash or sour stomach after meals; sleeplessness; nervous anxiety; vertigo; costiveness; irritation of stomach and bowels; piles, pain in the right shoulder; pain and soreness in the lower spine; aching and swelling of the muscles and joints, and many other disorders which, had enough in themselves, indicate graver and very serious dangers. The Goldsboro's Remedy makes no pretense of being an infallible "cure-all," but what is possible in the way of relief, repair, restoration of cheerfulness, comfort and strength can be done it will do. It is composed of the most valued medical agents, compounded according to a method peculiar to itself, and contains in addition certain long-tested remedies not employed in any other preparation. It is pleasant in taste and perfectly harmless, is not a purgative, and has in it no alcohol.

The proprietor has pleasure in submitting the following unimpeachable testimony from a large collection of letters by best known CITIZENS OF TORONTO:—

Upper Canada College, Toronto, 8th Sept., 1879.  
Dear Sir, Dr Goldsboro's Anti-Rheumatic Remedy has proved of great service; a few hours after using it I experienced very much relief, and I am now almost entirely free from pain. I shall certainly take every opportunity of recommending the use of the medicine to all who may be suffering from the pains of chronic rheumatism.  
To John Webb, Esq., Toronto.

M. BARRETT, M.A., M.D.  
From Messrs. E. Hooper & Co., the well-known Drug gists:

MR. J. WEBB, TORONTO.—Dear Sir, Having so long sold your Goldsboro's English Remedy, we can confidently recommend it, knowing it to be a *Bona Fide* medical preparation of true efficacy and value. The numerous sufferers from Rheumatism, Liver and Kidney complaints who have bought it of us, speak in the highest terms of its effects. It is pleasant to deal in so admirable a medicine. We remain, Yours truly,  
43 King Street West, Nov. 18, 1881. E. HOOPER & CO.  
From A. W. LAUDER, Esq., M.F.P.:

I consider the Goldsboro's Remedy a very valuable one, having used it with great advantage. Acquaintances to whom I have recommended it speak very highly of it.

A. W. LAUDER, M.F.P.  
I have much pleasure in testifying to the great value of your Goldsboro's English Remedy as a thoroughly effective tonic and restorative of digestive and nervous power. You may be sure I shall recommend so excellent a medicine where I have opportunity.

W. W. FARLEY, Alderman St. Andrew's Ward.  
I have very great pleasure in bearing testimony to the value of your Anti-Rheumatic Remedy. It has entirely cured me of a very bad attack of rheumatism.

JOHN TURNER, ex-Alderman.  
E. Casto, Esq., Barrister, Toronto, writes:

Dear Sir,—During several recent months I suffered severely from rheumatism, and relief from ordinary treatment not being satisfactory as I had hoped, I was induced to try "Goldsboro's Remedy," and am pleased to inform you that I received great benefit from it, and which improvement still continues. I think the medicine a very valuable one.

Mr. James Wain, the well known Toronto Boat-builder, says:—Early in the fall (1880), I suffered, chiefly from over-work, from deranged liver, bad digestion, want of sleep, and low spirits, and I felt altogether and utterly played out. After trying other remedies without the least benefit, I heard of and used your medicine. I was very soon much restored and the improvement continued. I have recovered my strength, and feel perfectly well and cheerful. I can hardly say enough in favour of the "Goldsboro's," to which I owe so much.

Mr. Humphreys, the well-known sportsman of this city, contracted rheumatism from severe exposure to cold and wet while duck shooting. He writes as follows: Having suffered greatly for the past eight months, being confined to my bed part of the time, I tried almost every other remedy, but without obtaining any relief. I was persuaded to try one of your bottles, from which I obtained instant relief. I have now taken four, and feel better than I have done for years.

TORONTO, Sept. 16, 1879.  
The Goldsboro's Remedy relieved me in a very few hours of a dyspeptic oppression from which I had suffered for some time, and gave me an excellent appetite. You may say or publish this in any way you think of most service.  
ALBERT H. FURNISS.

159 George Street, Toronto, 20th May, 1880.  
Dear Sir,—I have great pleasure in stating that your Goldsboro's English Remedy, as a restorative of the bilious and digestive organs, has proved to me a very valuable remedy, and I take great pleasure in recommending it to others afflicted with complaints of either of the above.  
JOHN BACON.

City Treasurer's Office, Toronto, April 4, 1881.  
I have pleasure in stating that Goldsboro's English Remedy has been of great service to me in restoring lost appetite and strength, and affording great relief from chronic rheumatism, from which troubles I had long suffered.  
J. PATTERSON, Cashier.

TORONTO, Sept. 23, 1881  
I had been troubled a long while with a severe sickness which made me feel quite played out, and I seemed all wrong, full of aches and pains and out of spirits all the time, nothing did me good. Often I had been told to try your Goldsboro's medicine, but did not do so till lately. Since taking it I am rapidly recovering health, strength and cheerfulness.  
CHAS. McCULLOCH.

Cr. wn Lads Dept., Toronto, Sept. 16, 1879.  
I have pleasure in saying that the Dr. Goldsboro's Remedy did all that was claimed for it. I felt very languid, run down and out of condition, with very little appetite. A few doses thoroughly set me up. I believe it to be a very valuable medicine and one that I can heartily recommend to my friends.

THOMAS DEVINE, F.R.G.S., Dep. Surveyor Gen., Ont.  
TORONTO, Jan. 16, 1881.

About the end of last July I had suffered for several weeks from severe and very painful neuralgia, so painful in fact, as to almost unfit me for business. Two-thirds of a bottle of the Goldsboro's Remedy gave me perfect relief in a few hours, to my surprise and gratification. The medicine cannot be made too widely known, and I shall do my part towards that end.

ALEXANDER DIXON.  
Dear Sir,—I am happy to state that the Goldsboro's Remedy which my wife used recently, acted splendidly. I shall have great pleasure in giving personal testimony to the excellence of the Remedy.  
J. B. RILEY, Proprietor Reverse House,  
82 Gerard St., W. Toronto, May 24, 1880.

Dear Sir,—I have great pleasure in recommending Dr. Goldsboro's Remedy to any one suffering from rheumatism, having suffered myself for five or six years with it in my knee. Trying everything prescribed for me had no effect. I only need one bottle of the above remedy, and now I have not the slightest pain or rheumatic symptom.  
E. BROWN, Dentist Office.

Price \$1.00 per bottle. Sold by all druggists, and by the Proprietor John Webb, 64 King St., East, Toronto, Wholesale Agents, Lyman Brothers & Co., Toronto.