

AN HUMBLE EFFORT.

De' leaf hung upon de tree
When summer days was pas',
"I guess," says he, "it's up to me,
It's all dat's left at las';
De blue and red of de posy bed
Is fadin' fas' away.
I neber 'mounted to much," he said,
"But I's all dat's lef' to-day."

An' de gold and scarlet handsomeness
Dat' he done hang out dat day,
Dey kind of lessened our distress
Foh the flowers dat went away.
An' we didn't chide him, wif jus' so few
An' say dat he wan't no good;
But we kinther kindher him, jes' a few,
Foh doin' de bes' he could.
—Washington Star.

TONIETTA'S QUESL.

I SHALL go to America! All Americans are rich! Why need we starve here, when plenty is waiting?" the angry words rang ever in little Tonietta's ear, and she could shut her eyes and see again the father stern and forbidding; the mother, pleading and tearful, and the handsome, dark-eyed brother, who had gone from their door in far-away Italy, that summer's day, and from whom they had heard no tidings.

That was long years ago, before they too, had come to America, this land of golden promise, in search of him. Tonietta had been a babe then; now she was quite a little woman. And Mariano, the lost one, would be 20 years old, a man, indeed. At first they had looked eagerly into every boyish face they met, sure that they would soon find him. But the days grew into weeks, the weeks into months, and now the months had counted off one whole year, and still no trace of him. They had questioned their countrymen wherever they went, but it was always the same doubtful shaking of the head, and some had even laughed. It was like searching for a grain of sand upon the ocean's shore. Even were he in this great, crowded, bustling New York, it was a hopeless task. And then the little sad-faced mother began to lose even the slender thread of hope to which she had clung so long, and sometimes she would say, "My Mariano is dead. I



"WHY DO YOU SING THAT SONG? WHO ARE YOU?

"Know he is dead!" then fall to weeping bitterly.

The little fruit store which the father had placed on the corner of a busy street was doing fairly well, and they might have been so happy had it not been for this dark day cloud that hung over them, and each grew darker; for soon the sad-faced mother lost all pride in the pretty cottage she had loved so well. She no longer sat before the door, with busy needle flashing in and out some snowy linen, but with hands folded idly before her she watched all day down the busy street, or wandered aimlessly about the little garden-plots, humming over and over again a plaintive Italian lullaby:

O che cari l'adoro, che il mio tesoro,
Vi mio d'amor, parla ancora!

"Dear mamma, why do you sing the same little song?" Tonietta would ask. "Because it is the one my Mariano loved best of all," the mother would reply. "If he is out there in the great world, I am sure its sweetness will someday reach his heart and bring him back to me."

It was but the foolish fancy of the yearning mother-love, perhaps, yet who can say that a kind heaven did not send it? And then there came an evening when little Tonietta, from her seat on the tiny doorstep, heard one from a group of kindly neighbors who had paused before the gate, saying pitifully:

"Poor woman! She is breaking her heart for the son that was lost. She will surely lose her mind unless he is restored to her, and it is more than likely that he has gone back to Italy."

"To Italy! To Italy!" the little girl started to her feet. Ah, why had she not thought of that before. "To Italy!" Yes! Yes! It must be so, for had he said he would come again, when he was rich like the rest of the Americans; and she must go to-morrow and tell him that the little mother wanted him—so badly, and he must come home with her, and then they would all be happy once more.

Her childish mind had forgotten all the long ocean voyage, and she could hardly wait next morning until the tiny lunch basket, which she always carried to kindergarten, was packed, and she could start. She had made up her mind not to tell her secret. It was to be her own, until the happy moment when she would return, leading her brother by the hand. She took from its place on the clock-shelf the little iron bank where she had hoarded all her savings, shook out a handful of pennies, then kissed her mother fondly and started on her journey. At the corner she climbed into a waiting car, and when the kind-faced conductor paused before her, she held out the little brown hand.

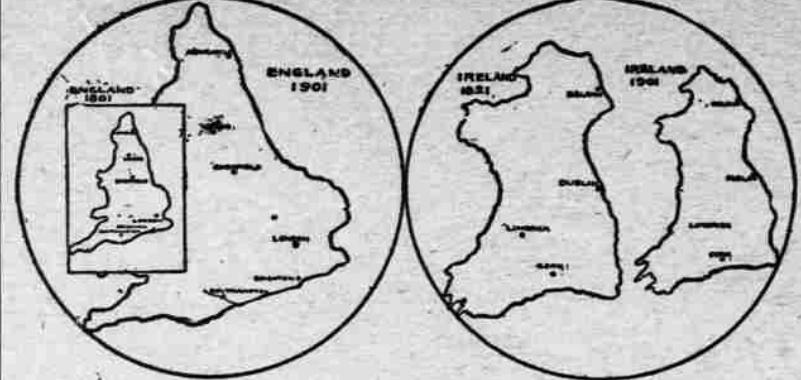
"To Italy, please," she said.

"To Italy?" he asked, in wonder. Then, "Oh, you mean Little Italy, but that's just 5 cents. You mustn't give me all your money."

And then she sat, with her great eyes very wide at the strange sights and sounds as they whirled swiftly away across the great city. She had never been so far from home before, so it was all new. At last the conductor came again.

"Here you are, little one," he said, as the car came to a stop. "Better run right, home to your mother," for he thought, of course, that she lived here

ENGLAND'S GAIN AND IRELAND'S LOSS.



Great Britain's census is expected to show a total population in England, Ireland, Scotland and Wales of 42,000,000. This expectation is based upon the average decennial rate of increase shown during the last half of the century. The figures contrasting the population of these divisions of the empire a century ago and an estimated to-day are:

England (including Wales)	1801	1901
Population	33,000,000	53,000,000
Ireland (first counted in 1821)	6,801,827	4,250,000
Scotland	1,05,420	4,350,000

Most remarkable showing of all—if one excepts the decline of Irish population—is the gain of London, first city in the world in size and financial power. At the beginning of the nineteenth century the imperial city had a population of 864,845. This has grown to more than 6,200,000 at the beginning of the twentieth century.

The rate of increase in most of the divisions of the empire have steadily declined since 1850, and the rate of loss in Ireland has also fallen correspondingly, a hopeful sign for the Emerald Isle. The losses are due almost entirely to emigration. In the case of the English emigrants the colonies have been the gainers mainly. Most of the Irish who left their island have come to America to make homes, though a considerable number of the millions who have put the dust of Erin behind

them have sought places of abode in all the far portions of the world drawn under the protection of the British flag.

The population of London, roughly speaking, doubles itself every four decades. In 1801, out of every ten people in England and Wales one person lived in London. To-day one out of every seven persons in England and Wales lives in London. This growth, it is scarcely needful to point out, has not taken place in central London, where the population has been diminishing by about one-twelfth in each of the last three decades. The increase is in the suburbs, where the small houses never cease to encroach and multiply. In the central area, which includes the districts of St. George's, Hanover Square, Westminster, Marylebone, St. Giles', the Strand, Holborn, the City, Shoreditch, Whitechapel and St. George's-in-the-East, the number of houses which cease to be inhabited, or are transferred to the category of "houses not occupied at night," amounts to more than 1,000 each year.

The fourteen largest provincial towns in England—Liverpool, Manchester, Birmingham, Leeds, Sheffield, Bristol, Nottingham, Bradford, Hull, Newcastle, Salford, Leicester, Oldham and Portsmouth—do not amount in joint population to the figures of London, even if the growing Outer Ring of suburbs be excluded.

In the Italian quarter, or Little Italy, as it is called.

For just one moment the little girl hesitated and looked about her, half-frightened at the noisy, crowded street, but in the thought of the sorrowing mother at home all fear was forgotten and bravely she started on her tramp. Ah, the terrors of that weary day and of the weary days that were to follow. Patiently she wandered through the busy streets singing over and over again the little lullaby that was to bring him back to them:

O che cari l'adoro, che il mio tesoro,
Vi mio d'amor, parla ancora!

Each evening she returned, so tired she could scarcely drag her weary feet, but with the morning hope and courage came again and the thought, "Surely to-day I must find him."

Passers-by wondered at the strange child who sang over and over again the same little song. The kind-faced conductor greeted her each day with a questioning smile, but Tonietta did not heed, for she thought only of her strange quest, and of the poor little mother who was growing paler and paler, until she was but a frail shadow of her former self. Very often a mist would come before the child's dark eyes and sobs would drown the faltering tones, but she could not give up. She must find her brother. It meant so much to them all. And it was through her tears, at last, that she saw him, although she did not know. It was the faltering tones that made him start from his seat on the door-step, where he sat, heartless and alone, gazing before him into a future that was dark indeed.

"Why do you sing that song? Who are you? What is your name?"

He caught her arm almost fiercely. Tonietta drew back in alarm. She had been looking for a handsome, well-dressed, happy Mariano, yet here, a ragged, sad-faced boy bent over her, a boy with a "something" in his dark eyes that made her answer, in spite of her fright, "My name is Tonietta. It is the little mother's song."

"My little mother! My little sister!" he cried. "Ah, Tonietta, don't you know me? Am I so changed?"

"Mariano! My brother!" She flung her arms about his neck and almost sobbed for joy. "Come—you must come home with me, for the little mother is waiting for us!"—Detroit Free Press.

UNINVITED INVENTIONS.

Great Problems for Which Solution Is Eagerly Sought.

Every home and workshop teams with profitable suggestions to the man with open eyes and mind, says a writer in *Everybody's Magazine*.

The fortunes of Mr. Carnegie, the Rockefellers, the Armours and all their associates were founded on just such observations. The cost of refining kerosene oil is paid to day from the despised sludge acid which used to foul rivers and harbors. The old waste of the slaughter houses brings in as much to-day as the flesh of the animals killed.

Nature has waste products still waiting for use. Prairie wire grass is one of these. It is now made into handsome furniture and furnishings. Corn-stalk pith is made into fillings for warships' hulls, to close watertight the holes made by an enemy.

Find a substitute for the elastic Para rubber and your fortune is made. Celluloid and oxidized linseed oil are fair substitutes for some purposes, but nothing has yet been found that possesses the true elastic properties of rubber from Para. There is still "nothing like leather" for shoes, but the inventor may find a substitute to his profit.

The automobilist is waiting anxiously for a satisfactory power to drive his carriage. The same power would solve the vexed question of cross-town cars in New York. The Metropolitan Street Railway Company is spending thousands in experimenting with compressed air and storage battery cells, but these are only makeshifts. Steam railroads need a similar power to operate independent cars for suburban service.

Liquid air and acetylene gas both offer new fields for the inventor. Although liquid air can be made for perhaps 5 cents a gallon, as yet not a single commercial use has been found for it.

Cost of Printing Bank Notes.

It costs almost exactly a cent apiece to print Bank of England notes.

WISDOM OF THE ANT.

WONDERFUL INSTINCTS OF THIS INSECT.

Provides for Itself in All Emergencies, and in Doing So Develops a Specialism Much More Complete than That of Man.

Man looks entirely to the outside world about him for the means of accomplishing his purposes; insects, on the contrary, drawing upon the resources of their own natural constitution, often adapt themselves to the conditions and requirements of their lives by structural modifications.

For instance, men make the tools they require for carving or for digging, insects grow them; vessels being needed as receptacles for liquid food, man learns the art of the potter, but the curious honey ants transform themselves into living bottles, to which the working members of the commune resort for shelter.

The tools of insects, exquisitely fashioned and finished, are much more perfectly adapted for the purpose they serve than are any contrived and manufactured by human beings, but there is a disadvantage connected with them—they cannot be laid aside. The tools dominate the tool-bearers, and check development in any direction not connected with their use.

This leads to the extreme specialization we find among insects. The egg producer, the queen of the termites, although she possesses the usual number of limbs belonging to her species, is totally incapable of locomotion, as are the living bottles of the honey ants. The queen lays eggs, she can do nothing else; the living bottles store up and yield food to other members of the family, and are incapable of performing other uses as if they were mere lifeless cells in a honeycomb.

Among the ants this tendency to specialization has resulted in establishing species limited to particular industries or to particular methods of living. Some species of slave-making ants, for instance, confine themselves so entirely to military affairs, and have so entirely lost the arts of peace and efficiency in domestic affairs, that they are not only obliged to depend upon their slaves to care for the young in the formicary, but to have the food placed in their own warlike mouths, and would starve in the midst of plenty were it not done.

The mandibles of these ants are entirely unfitted for work. They can neither crush, cut, nor saw, but being sharply pointed and curved, they make most serviceable weapons. The workers of the East Indian phellogenous diversus have among them gigantic soldier ants, a hundred times as large as themselves, and it would naturally be supposed that these big creatures with enormous heads would prove formidable defenders of the formicary, while the truth is that, so far from this being the case, they cannot bite at all, even when provoked to do so.

And yet the smaller members of the phellogenous commonwealths find a use for the great creatures. Numbers of them may often be seen riding about, as human beings do upon elephants, upon the heads and backs of their gigantic confreres.

But the Colobopsis ants, which burrow in branches, seem to have discovered how to profitably employ the big heads among them. They are placed at the entrances of the formicary dwellings, their great heads fitting in and filling the doorway.

As a worker belonging to the household approaches she is recognized by the "animated and intelligent front door," which draws back sufficiently to admit the entrance to its friend and then resumes its double office of sentry and barrier.—*Scientific American*.

CALLED HIMSELF IMPOSTOR.

Mark Twain's Opinion Given in the Strict Sense.

Sometimes on a sunny afternoon Mark Twain strolls up and down that part of Fifth Avenue and Twenty-third street where art and book stores are frequent. The humorist seems to find certain rest in peering into windows of these, though he rarely crosses their thresholds. He was about to turn away from the window of a shop when his eye was caught by what seemed to be an etching of himself. He was staring blankly at his likeness when he was joined at the window by one of those chatty individuals always ready for a street-corner exchange of opinion.

"Pretty good likeness of the old man, isn't it?" said the chattering, without seeing the writer's full face, which was partly in shadow.

Mark said it was.

"Say, what do you think of that fellow's work, anyway?" went on the chattering.

"I think," said Mark, still without turning his head, "that he is the greatest impostor the American people ever refused to take seriously."

"How so?"

"Well, because he really is serious and because nobody'll believe him; he passes for being humorous." With that Mr. Clemens faced his questioner.

"Well, I'll be switched!" ejaculated the chattering.

The face of the humorist became deeply concerned, says the New York Times. "For heaven's sake, don't tell any one I told you. It would ruin me with my publishers," he said, starting up the avenue.

Bu the chattering went home and told his friends.

MAKING GLASS HOUSES.

Recent Inventions Makes Possible Residences of Vitrified Material.

If the visions of a French savant are realized we shall all be living in glass houses before very long. The foundations and the walls would be constructed of a variety of glass recently invented called "stone glass," which has already successfully withstood the severest tests. The walls would be built of glass, held together by angle irons, so as to permit of a hollow space through which pipes could pass (the pipes themselves being glass work) conveying hot air, hot and cold water, gas, electric wires, drains and everything needed for the health and comfort of the inhabi-

tants. Stairs and balustrades, ceilings and wall decorations, mantelpieces and fireplaces, would all be constructed of glass.

Our chairs and tables, in the new glass age, will be made of vitrified material, toughened to the strength of oak and mahogany. Our cooking utensils, our plates and cups and saucers will be made of the same substance. Even our knives and forks will have glass handles if not glass blades. The new glass house will be absolutely clean and practically indestructible. The whole of its surface can be washed from the top story to the basement without a trace of humidity being left. Dust cannot collect on its polished surface, and the spider will find no place on which to hang its cobwebs.

They have already begun to pave the streets of Paris with glass, and it is found that the substance, while practically indestructible, is admirably suited to the feet of both men and beasts, and, as it neither holds nor makes any dirt, it is absurdly easy to clean. Its only fault is that it somewhat increases the noise of the traffic, but even this might be overcome. Perhaps

it might be possible, in connection with one of the many projected exhibitions, to construct on a modest but sufficient scale a dwelling of the kind M. Henrivaux describes. People would then be able to experience the actual sensation of walking along glass floors, of climbing a glass staircase, of being surrounded by glass walls, of sitting on glass chairs at glass tables, drinking tea out of glass cups and stirring it with glass tea-spoons. How far this could be accomplished with due avoidance of monotony it is hard to say.

WATER-DRINKING.

Declared to Be Beneficial to the Health in Various Ways.

When it is considered that the body is made up very largely of water it can readily be understood how important to health is a constant supply of this fluid. Many people have a notion that the drinking of water in any amount beyond that actually necessary to quench thirst is injurious, and acting on this belief they endeavor to drink as little as possible. The notion, however, is wide of the truth. Drinking freely of pure water is a most efficacious means not only of preserving health, but often of restoring it when failing.

All the tissues of the body need water, and water in abundance is necessary also for the proper performance of every vital function. Cleanliness of the tissues within the body is as necessary to health and comfort as cleanliness of the skin, and water tends to insure the one as truly as it does the other. It dissolves the waste material, which would otherwise collect in the body, and removes it in the various excretions.

These waste materials are often actual poisons, and many a headache, many rheumatic pains and aches, many sleepless nights and ill-tis days, and many attacks of the "blues" are due solely to the circulation in the blood or deposit in the tissues of these waste materials, which cannot be got rid of because of an insufficient supply of water.

Water is accused of making fat, and people with a tendency to corpulence avoid it for that reason. But it is not strictly true. It does undoubtedly often increase the weight, but it does so because it improves the digestion, and therefore more of the food eaten is utilized and turned into fat and flesh. But excessive fat, which we call corpulence, is not a sign of health, but of faulty digestion and assimilation, and systematic water drinking is often employed as a means of reducing the superfluous fat—which it sometimes does with astonishing rapidity.—*Youth's Companion*.

WATER PO