

soon you two hours since, I were now eight hundred francs richer than I am."

"Eight hundred francs in two hours is *gros jeu*," remarked Gabriel.

"Yes; I played high and madly. In fact, Gabriel, my friend," continued the captain, "my affairs, as I have before hinted to you, are just now in an awkward state; nevertheless, with your promised assistance, clever *coquin* that you are, all may yet be well."

"Lemaire, then, will take my promissory-note in lieu of that you are so eager to get out of his hands?"

"Not he, the villain! On the contrary, he plainly hints his opinion, and therein, *entre nous*, I agree with him—that my friend Gabriel has half-a-dozen *aliases*—all names well-known to messieurs the police, but not worth a sou upon a bill."

"That remains to be proved, Monsieur le Capitaine. In the meantime, what is to be done?"

"That, my friend, is the question. In the first place, then, one thousand francs, well-nigh all I am possessed of, shall, in case of success, be yours. Ah, that, in your opinion, is speaking to the purpose! Eh, Gabriel?"

"No doubt. I must, however, know without reservation exactly how the said thousand francs are to be earned. I know that such a sum cannot be had for nothing; still, I must know all the whys and wherefores of the business before I engage in it."

"Quite right; I expected no less from your experience and knowledge of the world. Know, then, I am about to confide in your discretion, as I certainly would not in the oath of Monseigneur the Archbishop of Paris, or of his Holiness the Pope; and for these plain reasons, my friend—firstly, that you would as lief hang yourself as appear before a magistrate for any purpose whatever; secondly, that if you did so appear, your evidence would not be worth the breath with which it was uttered. You see I am candour itself."

"Precisely. Well?"

"This, then, is the exact situation. But first order in some brandy. You remember, Gabriel," the captain went on to say, as soon as the brandy was placed upon the table, and his companion had resumed his seat, but in such a position that his countenance could only be partially seen where Regnaud sat—"you remember that, about a week after that poor devil of an artist of the Grande Rue Verte so unexpectedly paid his debts, and turned saint, I had a run of ill-luck, and that Lemaire—confound him!—would not lend me a franc without the security of my friend Dumontel, who had taken up his former acceptances in so satisfactory a manner. Well, I knew, of course, that my friend François Dumontel would not lend me his signature to save me from perdition; and so—and so," added Captain Regnaud, gulping down another glass of brandy, "finding there was no help for it, and confident that I should be able to retire the note before the month expired, I—I—, you understand?"

"Not exactly."

"No! then my brain is duller than that flashing eye of yours. I mean that I signed the name of François Dumontel without its owner's consent."

"In plain French, that you forged François Dumontel's signature to a bill for five thousand francs?"

"Just that. Well, Lemaire now refuses to renew it, even if half, as I offered yesterday, were paid down, or take any other security I can get in its place; and it is due in four days."

"Morbleu, but that is embarrassing. I see nothing for it but flight, or—blowing Dumontel's brains out—legally, of course."

"Thou art a shrewd rascal, Gabriel," exclaimed Regnaud with vivacity. "Flight happens to be out of the question, and if nothing better can be done, I must boldly outface the matter, swear the signature is genuine; the imitation, I can answer for it, is perfect, and Dumontel's former acceptances in my favour will naturally give force and colour to my assertion. That course would nevertheless be a dangerous one; and the other expedient you have suggested strikes me as the safest, surest plan."

"It struck me that you might provoke Dumontel to a duel, and slay him. You are an adept, I have heard, at that game."

"You have heard aright; but there are cogent reasons why I should not fight him. In the first place, if he should escape with life, which, however, is not likely, the affair of the bill of exchange would have an ugly look. Next, to kill him would damage me irretrievably with his charming widow, whose good graces I do not yet despair of winning; so that, in brief, Gabriel, if you would earn the thousand francs, you must fight and kill Dumontel yourself."

"I! Bah! you rave!"

"Perfectly sane, if not precisely sober, I assure you, friend Gabriel. What objections have you?"

"What objections? Come, that's pleasant? To begin with, then, he is, you have told me, a good fencer, so that I should have an excellent chance of receiving, instead of a thousand francs, six inches of cold steel for my share of the bargain."

"Tut, tut! There is no risk of that. You shall pink him without the slightest risk to yourself, as I have already four in my lifetime; the last a far smarter fellow than Dumontel—one Charles Bouis of Lyon—What ails thee?"

"A sharp spasm, that's all; pass the brandy."

"The expedient," continued Regnaud in compliance with his companion's gesture, "is as simple as it is safe. I will provide you a *just-au-corps*, or under-shirt, fitting close to the body; so flexible, and otherwise artistically manufactured, that though impenetrable by the keenest sword-point, it cannot, except by the closest, minutest examination, be distinguished from plain flannel. After throwing off your coat, you will open the vest above the *just-au-corps*, before engaging, to shew that all is above board, and the affair is as good as finished—your man as safely and certainly spitted as a fowl."

Gabriel was some time before he made up his mind to accept Regnaud's atrocious proposal; but at last he said:

"Well, the venture is worth trying by a fellow so out of elbows as I am. Where can I meet with this Dumontel?"

"At Richard's, the restaurant, not far from the Louvre. He dines there most evenings between five and six o'clock. He is of the true southern breed, and therefore easily provoked."

"And the thousand francs?"

"Five hundred at starting for the Bois de Boulogne, and five upon returning—successful."

"It is a bargain; and now I must begone, for this con-

founded cholice increases upon me, and I must procure some more potent remedy than brandy."

"Good evening, Gabriel. The thousand francs, depend upon it, are as safely yours as if already pouched."

Le Capitaine Regnaud slept soundly at daybreak the next morning, his head glued to the pillow by the strong potations of the previous evening; nevertheless awake he must and did under the infliction of the shouts and shakings of some half-a-dozen gendarmes; and cloudy, mystified as were his wine and sleep oppressed senses, he was soon made to comprehend that he, Jules Regnaud, ci-devant Capitaine de Chasseurs, was on his way to prison, charged with the grave crime of having forged the signature of François Dumontel to a bill of exchange for five thousand francs.

The Cour d'Assises of the Seine, before which Regnaud was arraigned, was in session the next week but one. Various formalities having been gone through, the previously sworn testimony of Lemaire, that he discounted the bill for the accused, and that of François Dumontel, that he had not signed it, nor authorized any one else to do so, was repeated in open court—the accused, who had recovered all his audacity, frequently interrupting the last witness by questions and assertions, tending to shew that he, Dumontel, had given the bill, as he had former ones, in discharge of a gambling debt.

"Listen to me, Regnaud," said the president. "You are acquainted, it appears, with one Gabriel?"

The accused appeared to blench for a moment; but recovering himself, said boldly:

"Yes; I know there is such a fellow, an escaped forçat, I had latterly reason to suspect, and I in consequence kicked him out of an estaminet."

"An estaminet in the Faubourg St. Antoine?"

"Yes—no; I do not precisely remember, Monsieur le Président."

"Did you not confess to him that you had forged François Dumontel's name to this bill for five thousand francs?"

"Never. If he has said so, it is a vile intention to be revenged upon me. And of what worth, Monsieur le Président, let me ask, is the testimony of an escaped forçat, which I contend Gabriel to be?"

"Did you tell him that you possessed a curiously contrived *just-au-corps*, or undercoat, impenetrable by pistol-ball or sword-thrust, by means of which you had been enabled to safely slay four persons in pretended duels?"

"Never! It is all, I insist, a hideous calumny," replied the prisoner, but now ghastly pale, and with much diminished confidence.

"It is certain, nevertheless, Regnaud, that such an article has been found at your lodgings. You have other witnesses, Monsieur le Procureur-General; let them be examined."

"Yes, le Sieur Bouis, ancien commissaire de police, and member of the Legion of Honour."

"Accused," said the President, whilst the huissier was gone in quest of the witness, "do you know the Sieur Bouis?"

"No, Monsieur le Président."

"Look at the witness," continued the President, indicating M. Bouis, who had entered the court, dressed in deep mourning, and wearing, as usual, his ribbon, "and say if you persist in that answer."

"Yes—no, that is" — stammered Regnaud, upon whose forehead large drops of perspiration suddenly broke out.

"You are not quite sure. The witness will refresh your memory."

With quick dexterity, M. Bouis assumed a black wig, whiskers, and moustache, and turning fiercely towards the accused, exclaimed:

"Now, villain, do you know me?"

"Gabriel!" shrieked the accused, surprised out of all self-control—"I am lost!"

There could be no doubt of that; and ten minutes had not passed before Jules Regnaud was convicted and sentenced to the galleys for life—the President expressing his regret that he could not be punished capitally for the murders by duel he had confessed to have committed. He was sent with the next chain-gang to Brest, where he survived this his fifth and last duel, though not fought with sword or pistol, about two years only. I have not been able to discover any further trace of the fortunes of François and Euphrosyne Dumontel, or of the ex-commissary of Police, Bouis.

The Paris *Liberté*, which paper takes special care to instruct its readers in matters appertaining to England, in writing about the Oxford and Cambridge boat race, says that the champions sometimes go down the Thames as far as Kew and even Richmond. "The course is always straight and without turns." Then from 25,000,000 to 30,000,000 of bets are made each year at Putney, and the morning after the race fifty suicides are committed in London by losers, who return to town and blow out their brain, "but the custom is so general that no one takes any notice of it." Both Houses of Parliament are present at these jousts, and the Archbishops of York and Canterbury and the Bishop of London occupy a place on the ferry-boat, which ferry-boat, followed by two or three hundred craft, descends the river at the regulation distance of a hundred yards from the rowers. The above information was probably derived by the correspondent of the *Liberté* from the hackney-coachman who charged him six pounds sterling for the journey.

A SUBSTITUTE FOR A RUBBER.—The screw steamer "India," of the Anchor line, plying between Glasgow and New York, put into Halifax, N. S., on February 23rd. She had been twenty-seven days out from Glasgow, having lost her rudder on February 8th. Thirteen days afterwards, she fell in with the American fishing schooner "Joseph H. Chandler," and lashed her to her stern, the schooner steering the strange vessel compounded of two craft dissimilar from each other in every respect.

PINK TREES THEIR OWN INCENDIARIES.—A French writer thinks that the very frequent fires which occur in pine forests in summer, far from any habitation, are not due, as has been commonly believed, to careless or mischievous people, but to the action of the sun's rays concentrated by the globules of resin which exude from the trees. These act as burning lenses, and start the conflagration, which, of course, spreads rapidly among such inflammable material.

SCIENCE NOTES.

THE SUNFLOWER AND NITROGEN.—No plant absorbs nitrogen so rapidly as the sunflower, as ravenous as the stomach of an ostrich. A pigeon was buried between the roots of a sunflower, after some weeks not a vestige of the bird was found—the plant had devoured and digested even the feathers.

The Channel tunnel scheme has assumed such practical shape that one-third of the £30,000, which it is supposed will suffice for cutting the experimental drift way, has been subscribed. From Dover to Calais in less than an hour, and with no sea-sickness, will be regarded by many as the very perfection of travelling, although done in a tunnel. M. Thiers believes a tunnel under the Channel is as possible as one under Mont Cenis, but he said recently France could devote no capital to it. Every facility and encouragement would, however, be given to English capitalists.

ANTIDOTE TO CARBOLIC ACID.—The use of carbolic acid as a disinfectant, now so common everywhere, is fraught with danger, as it is a virulent poison; and if it be accidentally taken internally, an effective antidote will be necessary. Dr. Husemann, of Gottingen, suggests, for counteracting its effects on the stomach, a new preparation which he calls *calcaria saccharata* (saccharate of lime), prepared by dissolving 16 parts refined sugar in 40 parts water, and adding 5 parts slaked lime. Digest the mixture for three days, stir occasionally, filter and evaporate to dryness.

AN ABSCESS CURED BY INADVERTENCE.—Dr. Du Hadway reports the singular restoration to health of a man afflicted with psoriatic abscess. The Doctor tried several remedies without success, and at last prescribed two drachms iodide of potassium in six ounces distilled water; dose, a tablespoon-full three times a day. The patient, a foreigner, misunderstood the directions, and swallowed the whole at once. Strangely enough, the 120 grains iodide of potassium did him no harm; but, on the contrary, his appetite, which had been very poor, was restored, and in ten days the abscess was healed. He needed no further medicine, and is completely restored to health.

A NEW EXPLOSIVE.—A new explosive has been lately brought under public notice by Dr. Justus Fuchs, of Alt Berun, in Prussian Silesia. It is called fulminatine, and is another kind of nitrite explosive. This new agent differs from dynamite in having a considerably larger contents of nitro-glycerine, and in the 25 per cent of silica contained by the latter being replaced by 15 per cent. of a chemically prepared substance. This hitherto unknown substance is said to possess much greater absorbing power than *kieselguhr*, and, when ignited, to be almost entirely dissipated as gases, thus considerably augmenting the explosive effect. While all the silica of the dynamite is left as a white residue after explosion, fulminatine only leaves a little black carbonaceous remnant. The prices of both explosives are the same.

SIMPLE DISINFECTANTS.—As a simple method of employing carbolic acid, C. Homburgh, of Berlin, proposes to saturate sheets of coarse millboard with the disinfectant in question. The sheets may be hung up in the rooms requiring purification, or a small piece may be torn off when a small quantity only of carbolic acid is wanted. Sheets of millboard, having an area of about seven square feet, and containing about one-fifth of a pound of carbolic acid, are sold in Berlin for a shilling a piece. Dr. Hager gives the composition of a disinfecting paste for use as a washing power. It consists of 100 parts of white clay, 1,000 parts of distilled water, and thirty-five parts of ordinary nitric acid. The mass thus obtained is allowed to stand for a few days, being stirred frequently. The supernatant fluid is then to be poured off, and the clayey mass thoroughly washed with distilled water. Five parts of permanganate of potash are now to be added, and the composition, when dried, is made up into tablets and wrapped in paper saturated with paraffin.

SCARLET FEVER NON-CONTAGIOUS.—Dr. E. H. Lewis, in an interesting article published in the *Northwestern Medical and Surgical Journal*, states some striking facts bearing upon the contagiousness of scarlet fever. From data, gathered during an epidemic in 1870, the doctor concludes that scarlet fever is not caused by sewer gases, or marsh miasms, or decaying vegetable matter, impure water, or the habits of the people; for in the cases observed by him all these causes were absent. The epidemic travelled directly and rapidly through well drained and elevated regions of country, sweeping everything before it. In the cases observed, the Doctor could find nothing to enable him to believe in its contagiousness. He says: "I have not the slightest doubt that the causes of scarlatina depend upon some peculiar condition of the atmosphere favourable to the propagation of the scarlatina poison, and that it travels in a manner similar to epidemic cholera, the principal feature of which it simulates, the difference being that in cholera the force of the disease is spent upon the bowels, while in scarlatina it is expended upon the skin and throat."

IGNITION OF EXPLOSIVES.—Interesting experiments were recently made by Messrs. Leygue and Champion, to ascertain the temperature at which certain explosives ignite. They used for this purpose a bar of copper, which was heated at one end only. It was provided with small grooves, placed 10 centimeters apart from each other, and provided with metallic alloys of different fusibility, so that the temperature of each part of the bar was easily ascertained. The substance under trial was then strewn upon the bar in small quantities, and the place where it ignited gave the temperature of ignition. Thus was it shown that, for their explosion, was required for:

	Deg. Cent.	Fahr.
Chassepot percussion cap powder	191	374
Fulminate of mercury	200	392
Equal parts of sulphur and chlorate of potassium	200	392
Gun cotton	220	428
Nitro-glycerine	257	494.4
Chasse powder	288	550.2
Cannon powder	295	562.8
Picrate of mercury, lead and iron	296	564.6
Picrate powder for torpedoes	315	598.8
" " musket	358	676.2
" " cannon	380	715.8

These researches prove the great explosive power of fulminates and nitrite compounds, while our ordinary gunpowder and picrate powder may be employed with much greater safety.