SIEGE NOTES - WINDOWS TO THE PAST

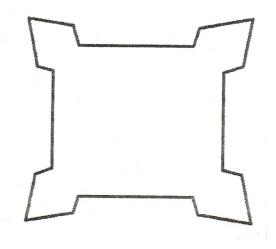
PART I

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Siege warfare is described in the dictionaries as "a military blockade of a city or fortified place to compel it to surrender". The word is derived from the Latin, sedere, to sit; thus the "sitting down" of an army before a fortified place for the purpose of taking it by assault or by starving it into submission. Throughout the years a by-product of this form of warfare has been the production of "siege notes", paper money of necessity, to be used in commerce by those under siege. As we will see, the use of these unusual pieces covered a period from the late 1500s well into the 1900s. During this period they were employed in diverse places under remarkable and often unexpected circumstances. These notes only came into use during protracted sieges, many of which lasted up to a year. As one would expect, the siege notes found today are at best uncommon, many being of the highest rarity. Nevertheless they stand as testaments to bygone struggles, leaving for us an exciting area of numismatics.

Since warfare began, combatants have built structures to defend their towns against the enemy. From the Middle Ages onward strong castles protected the lands of the lord from attack. When threatened, the peasantry collected within the fortification to resist assault. Gradually this concept was expanded to encompass entire towns where fortifications were expanded to protect the entire population within. These defenses consisted of high city walls constructed with massive stones replete with an occasional guard tower, or perhaps, a surrounding moat with which to make attack all the more difficult. During the sixteenth century this type of fortification had become obsolete. This was brought about with the advent of artillery, which made castles and city walls easily penetrable.

To meet this new threat, the Italians commenced constructing forts that incorporated artillery into their own defense. The typical plan for this type of protection was called the "bastion". These fortifications were designed so that no way existed that the attacker himself would not be subjected to artillery fire. The bastions were angular forts with sections jutting out from the corners from which the defenders would have a clear line of artillery fire with which to sweep any attackers attempting to scale the walls. Often dry moats were constructed at the base of the walls, which served as a deadly trap, making it more difficult for the

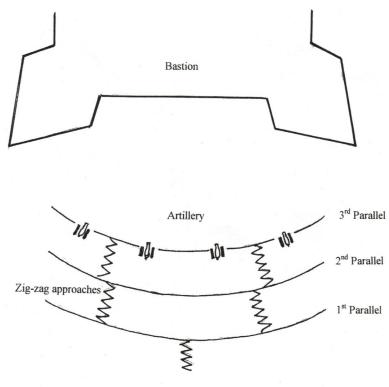


Typical seventeenth to nineteenth century bastion.

attacker to climb the walls. This type fortification, with modification, was used well into the mid-nineteenth century when the advent of the rifled cannon with its greater accuracy and firepower made them, in their turn, obsolete. One example of this type structure may be found in Baltimore. Fort McHenry, a typical masonry star fort surrounded by a dry moat, provided the principal defense for the city from attack by sea. This fort was instrumental in repelling the British fleet, which attacked the city during the War of 1812. It was here on the morning of September 14, 1814 that Francis Scott Key, seeing that the fort had not surrendered during the night's bombardment and still flying the American flag, was inspired to jot down the words to our "Star Spangled Banner".

The science of siege warfare reached its highest development in the seventeenth and eighteenth centuries. If a fort stood in the way of an invading army, those men couldn't simply march around it. If left in their rear, such a fortress would prove too great a threat to the army's supply and communications lines. It was not until the seventeenth century that tactics were developed to overcome this problem. The man responsible for this was Sebastian Vauban, the chief military engineer in the court of Louis XIV.

To provide additional protection to existing fortifications, Vauban's engineers elaborated upon the bastion concept by erecting multiple lines of defense around the fort. Under his direction French cities were fortified and new forts built. His chief contribution however, was the development of a systematic plan to be used when attacking a fortification. In order to reach the defenders, the attackers had to scale the wall, break a passage through it, or tunnel underneath it. Thus, the



Vauban's siege system

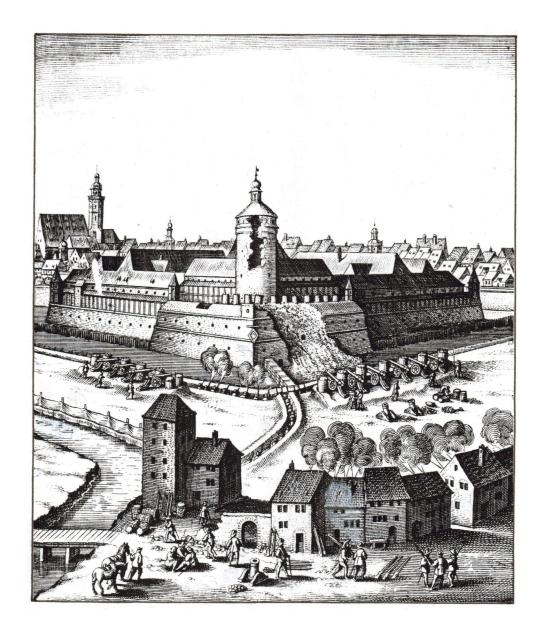
defenders sought to build the impregnable fortress, while the besiegers sought to develop a method to overcome these defenses. Vauban's system involved parallel approaches using trenching as a technique to gain closer access to the bastion under siege. The basic plan was to dig a trench parallel to the enemy fort just out of range of his artillery. These ditches were approximately four feet deep. When the dirt removed was piled up in front of the ditch, a parapet was formed providing the attacker with six to eight feet of protection from the enemy artillery. earthwork was known as the first parallel. From this ditch zigzag trenches were dug toward the fortification. Protected by the parapet the attackers were immune to enemy fire, as the enemy was not able to fire directly down the approaching trench. When the zigzags reached a point at which the fort was within the attacker's artillery range, a second parallel was dug. From this point siege artillery was used to batter the walls of the defenders. If surrender wasn't imminent, a third parallel would be built bringing the artillery within point blank range. A breach of the fortress walls would be followed by an infantry assault, known as the forlorn hope, to gain access to the interior. This system proved extremely effective and was used repeatedly in the many wars fought by the European powers during the eighteenth and nineteenth centuries.

An excellent example of Vauban's siege method came into use at the end of the American Revolution. The siege of Yorktown lasted from 28 September until the town's surrender on October 17, 1781. The British general Cornwallis held the village of Yorktown after allowing his army to become trapped on a narrow peninsular between the York and James Rivers. When a combined force of 16,000 American and French troops arrived on the evening of 28 September, General Washington ordered an immediate advance upon the British outer defenses consisting of a series of earthworks thrown up around the town. As the British consolidated their forces closer to the town, the colonial army using Vauban's system, dug a series of parallels each closer than the last from which their artillery could subject Yorktown to intense bombardment. With the British fleet bottled up by the French fleet blockading the entrance to Chesapeake Bay, and with no hope of escape, Cornwallis surrendered thus bringing the Revolutionary War to a close.

Sieges were costly in time, money and life. They were notoriously gruesome affairs, often with massive casualties in dead and wounded. The nature of a siege favored the attacking force, which could vary its resources in men and ammunition, while the besieged could not. After blockading the fort to prevent the relief of men, food and supplies from the outside, the typical siege advanced to the trenching stage. The etiquette of warfare at that time dictated that once the artillery had blasted a hole in the fortification that was considered breachable, it was deemed the honorable thing to call upon the commander to surrender. Such a surrender was considered no disgrace when further resistance would lead only to additional needless loss of life. In the event the commander did not yield to this humane practice, tradition dictated that no quarter would be given to the garrison or the city resulting in the plundering of the unfortunate town.

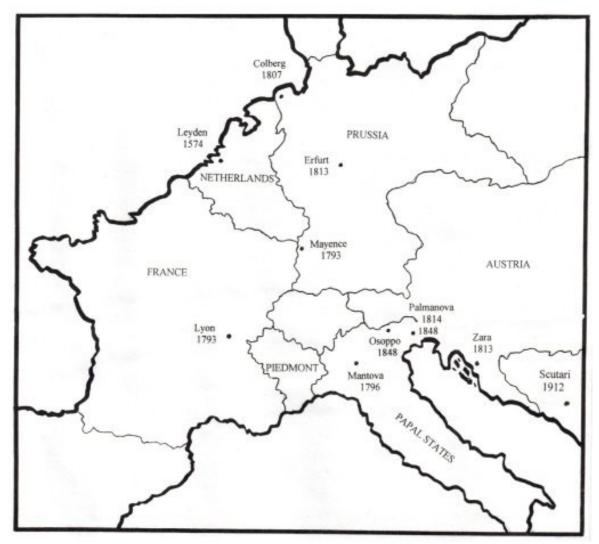
With the advent of better artillery and different tactics the military engineers were unable to adequately protect fortresses; thus siege warfare, over time, became less significant. However, this did not keep the warring powers from lavishly expending money and labor on fortifying their strategic places.

The longer the siege, the more desperate the circumstances of the besieged became. Defenses turned into semi-permanent fortifications as the siege wore on. Purely military fortifications could not withstand a siege of any length, while a large fortified town or place could do so. While such a place could not continue to function as a town, it could still maintain an existence devoted to purely military ends. It was only while under protracted siege that the necessity for siege money arose.



Idealized view of a typical seventeenth century siege. Artillery has succeeded in breaching the bastion's outer defenses in preparation for the "forlorn hope", a general assault upon the fortification.

We will now examine several sieges, which produced emergency paper money. (See Table 1.) Some confusion may exist as to the names of the towns under siege. Inasmuch as the French, German and Italian languages were involved - one for the besieged and one for the attackers - it is understandable that these places are known by different names. The short table below attempts to make the comparisons:



While besieged by enemy forces, money of necessity was issued by the defending forces in these European towns. Year of siege indicated.

Leyden	-	Leiden	Mayence	-	Mainz
Lyon	-	Lyons	Mantova	-	Mantua
Colberg	-	Kolberg	Zara	-	Zadar

The sieges discussed below are listed in chronological order.

The Siege of Leyden

The siege of the city of Leyden, in modern day Netherlands, is believed to be the first instance wherein paper money of necessity was used. Although Leyden boasts a wide variety of metallic siege coins from the 1570s, it was here that the first paper siege notes were issued. These "notes" are not notes at all but are, more

Table 1.

DEFENDING FORCES WHICH ISSUED SIEGE NOTES

Location	Year	Defending Force	Besieging Force	Outcome
Leyden	1574	Dutch	Spanish	Siege lifted
Mayence	1793	French	Prussian	Honorable capitulation
Lyon	1793	Royalists	Republicans	Surrender, Lyon sacked
Mantova	1797	Austrian	French	Surrender, many casualties
Colberg	1807	Prussian	French	Truce negotiated
Erfurt	1813	French	Prussian	Peace treaty
Zara	1813	French	Austrian	Surrender
1 st Palmanova	1813-1814	French	Austrian	Successfully defended
2 nd Palmanova	1848	Italian	Austrian	Surrender
Osoppo	1848	Italian	Austrian	Surrender
Khartoum	1884	British	Arab	Slaughter
Koffyfontein O'okiep	1901	British	Boers	Successfully defended
Mafeking	1899-1900	British	Boers	Freed by relief force
Scutari	1912	Turks	Montenegrins	Capitulation

properly, considered coins. When besieged Leyden exhausted its supply of silver, the coins were made of paper torn from prayer books. Resembling the real thing, this money, struck from coin dies, nevertheless was made of paper.

Are these items coins or paper money? The controversy could go on forever. Being a paper money enthusiast, I prefer to view them as paper money, and offer in support of my thesis the dictionary definition of a "coin". Trusty Mr. Webster defines a coin as: " a flat round piece of metal issued by government authority as money", or, "metal money". Since these "coins" are not metal, they must be considered "paper", or so my logic goes!



Metalic siege money of Leyden (left), struck in 1574 from a round coin die onto a diamond shaped silver planchet. As the supply of silver available for coinage dried up during the siege, Leyden continued to mint coins made from paper torn from prayer books. These cardboard "notes" became the first paper money to appear in the Western world. Prior to this only the Chinese used paper money.

A cardboard coin struck during the Spanish siege of Leyden in 1574 may be seen at right. The arms consist of a rampant lion with shield and sword. Note the counterstamp located at six o'clock. By order of Prince William of Orange, provincial counterstamps were added to all coins in excess of 1/10 daalder. This act increased the value of the coinage in circulation by one eighth, which was then used as a war contribution.

Inasmuch as we are dealing in this article only with paper siege notes, I will touch on the metallic siege coins only briefly. These metallic coins were emergency issues of cities under the Dutch United Provinces, which had been under revolt from their Spanish rulers since 1568. The Leyden siege coins are known to

the Dutch as "klippes" or otherwise as "obsidional" coins, an obsidional coin being defined as "a piece of money issued for use during a siege". Interestingly, this definition would seem to cover both metallic and paper issues.

There were more than thirty instances during the Dutch War of Liberation, which necessitated the issuance of this type of emergency money. The typical siege coin was struck from coin dies onto square silver planchets. By the year 1573 the Dutch defenders were running out of funds with which to support their cause. To alleviate this situation and enable continued resistance against the Spanish, the states of Holland and Zeeland raised funds for the war by increasing the value of silver coinage by 1/8th as a war contribution. Commencing in 1573, every coin in excess of 1/10th daalder was counter-stamped by order of William Prince of Orange with an oval coat-of-arms of its respective province. Later, the tide of war turned against the Spanish. In the year 1578 the Spanish, in turn, found themselves besieged by the Dutch at Amsterdam. The Spanish governor of Amsterdam then authorized the striking of silver obsidional coins for use during the siege.

A chronological listing of obsidional coins may be found in Maillet's *Monnaies Osbidionales et de Necessite*, published in 1870 and reprinted in 1973. One might also refer to "*A Check List of Siege and Necessity Issues*, 16th to 20th *Century*" written by Frank Lapa and published in 1968. This booklet is available in the NI Library.

Leyden in 1574 was the second largest town in Holland, after Amsterdam. It was the capital of the cloth trade where weaving establishments dominated the city's industries. It is most famous, however, for its brave defense while under siege by the Spanish army during the period May to October 1574. When all of their frontal attacks failed, the Spaniards decided to starve the city into submission. It was at this point that Philip, William of Orange, ran out of funds. An outside observer noted at the time that "It appears that men who are fighting for their lives, their firesides, their property and their religion are content to receive rations only, without receiving pay". After months under siege, during which time they endured hunger, illness and starvation, the ravaged citizens of Leyden still refused to surrender. On the verge of capitulation, Leyden was relieved from siege on the third of October 1574 by the quick action of Dutch insurgents who cut the dykes, flooding the city, thereby enabling their ships to carry provisions to the starving inhabitants. The third day of October is still celebrated in Leyden when the townspeople eat the same food that was furnished their besieged ancestors: herring, white bread and hutspot.

There are eight known specimens of Leyden cardboard money made from coinage dies. They range in value from 5 to 30 stuivers. All are dated 1574. Some bear countermarks while others do not. A listing of these pieces follows:

5 stuiver	1574	30mm	Crowned lion with shield and sword,	
			Legend: "Pugno Pro Patria",	
			With and without countermark.	
14 stuiver	1574		Description not available.	
16 stuiver	1574		Description not available.	
18 stuiver	1574		Description not available.	
20 stuiver	1574	37mm	Crowned lion with liberty cap on pole.	
			Obverse legend: "Haec Libertatis Ergo",	
			Reverse legend: "Godt behoedeLeyden"	
20 stuiver	1574	37mm	Crowned lion with standard, legends as	
			above. With and without countermark.	
28 stuiver	1574	43mm	Crowned lion with sword and shield	
			Legends as above.	
30 stuiver	1574	48mm	With and without countermark.	

The Siege of Mayence

Mainz is a river port in Germany located at the point where the Main River meets the Rhine. Its French name is Mayence. One of the great historical cities of Germany, it grew up on what was once the site of a Roman camp called Maguntiacum, founded in the first century B.C. The city was later given over in the year 746 to a succession of German archbishops who ruled as princes of the Holy Roman Empire. Serving as electors they had much influence in crowning the German kings. Mainz flourished under the rule of the archbishops-electors, growing rapidly as a commercial and cultural center. Mainz is also famous as the residence of Johann Gutenberg (1397-1468), the inventor of movable type used in printing. After that invention, the city quickly became the principal European printing center.

By 1792 the French Revolution had spread to the German Rhineland. General peasant unrest was prevalent at this time in France. Population growth had outstripped agriculture's ability to produce enough to feed the people, resulting in constant food shortages. Not only were the disaffected peasants starving, they were excluded from political power as well and were less and less inclined to support the old feudal system. All this occurred at a time when French participation in the American Revolutionary War had completed the ruin of the state's finances.



With the advent of Gutenberg's movable type, printing establishments such as this sprung up throughout Europe in the 1500-1600s. After that it was only a matter of time before paper money made its appearance in Europe.

Burdened by the needs of the military, the government was forced to borrow heavily.

In 1786 the government proposed new land taxes in order to avoid bankruptcy. Merchants, shopkeepers and artisans all opposed this move, and when Louis XVI ordered troops into Paris in an attempt to suppress the peasants' grievances, they were provoked to insurrection. The people seized the Bastille, the symbol of royal tyranny, on July 14, 1789, commencing the revolution. The majority bourgeois then drafted new decrees calling for the equality of rights, which the king refused to sign. Louis XVI returned to Paris from Versailles, where the assembly worked until September on a new constitution. The new constitution abolished feudalism and assured the vassals who worked the land equality of rights. Church lands were nationalized in order to pay off the public debt, introducing into the currency a series of royal and then republican "assignats". The new constitution also called for France to be ruled by a limited monarchy, vastly reducing the king's power.

The events unfolding in France had a profound influence upon the rest of Europe. Revolutionary clubs were formed and there were demonstrations in the









During the French Revolution the German city of Mainz, on the Rhine, was occupied by the revolutionists. Known to the French as Mayence, the fortress and garrison were put under siege by the Prussian army. Mayence held out for nine months before capitulating. During this period two issues of siege notes appeared. The first series consisted of various handwitten amounts on the reverses of French royal assignats. Shown here are the 20 livres (pound) and 50 livres assignat notes. All Mayence siege notes carry a round authenticating stamp dated Mai 1793.

streets. These actions were looked upon with alarm by Europe's royalty. As the revolution was quietly being exported to the rest of Europe, supporters of the revolution found themselves persecuted, leading France to declare war upon Austria and Prussia in April 1792. These powers, seeing their own dynasties threatened, wished to restore Louis XVI to his former position. After suffering defeats by the Austrian-Prussian army, which was advancing upon Paris, the peasants, fearing they had been betrayed, imprisoned the royal family in the

Tuileries where they were later massacred. On September 21, 1792 France was declared a republic.

The spring of 1793 again saw the Austrian-Prussian army advancing upon Paris. While the principal French army invaded Holland in the north the Prussians crossed the Rhine driving the defending force under Custine back toward Paris, exposing Mainz to siege by the Prussians. Custine had left a garrison of 2,900 soldiers behind to defend Mayence. The combined Austrian-Prussian force chose to stop their advance at the Rhine in order to invest Mainz instead of pushing on to Paris. After a protracted siege lasting from 21 October 1792 to 22 July 1793, during which time the French forces suffered great damage, the fortress at Mainz capitulated. The French garrison put up stiff resistance, eventually obtaining an honorable capitulation from the Austrians and Prussians. They marched out of the besieged fortress on 23 July having lost the fort and 237 guns to the enemy.

The defenders of Mayence issued two distinct series of paper money during the siege. The first series of notes consisted of handwritten amounts written on the backs of French royal assignats dated 1791 and 1792. The written amounts were double that of the face value of the original assignat; i.e., vingt livres (twenty pounds) on an assignat of 10 livres, cincquante livres (fifty pounds) on a twenty-five livre note, etc. A total of three notes were put into circulation during the siege in this way. These notes were in the amounts of 20 sous, and 20 and 50 livres. The handwritten endorsement read: "Nr. _____, Assignat Monnaie de Siege Vingt Livres Remboursables in Especes" (Number _____, Assignat Siege Money of twenty pounds reimbursable in cash)". All assignat siege notes were handsigned by six authorizing officials. In addition to the handwritten values and signatures all carried a round vermilion stamp which read: "SIEGE DE MAYENCE - MAY 1793 - DE LA REP. FRANC".

A second issue of Mayence siege notes was printed in the city while it was under siege. These square notes were made of durable cardboard and are uniface. They were issued in denominations of 5 and 10 sous and 3 livres. The text reads: "No.____ Monnoye de Siege Cinq Sous a echanger contre Billon ou monoye de metal de siege" (This five sous siege note is exchangeable for 5 sous in metallic money) together with the value shown as "5 Sols", etc. below, all enclosed within a simple black border. These notes have but three signatures, either printed or handwritten. The same vermilion hand-stamp as that used on the royal assignats appears in the lower left corner of the note.



The second series of Mayence emergency money consisted of small cardboard, uniface notes in denominations of 5, 10 sous and 3 livres. These values helped facilitate trade within the city while under siege. The notes state that they may be exchanged for metallic money.

Several variants of the three notes exist which include notes without a series designated and those bearing series "A" or "B". Some notes were hand signed while others have facsimile signatures. Finally, a printing error occurs on some notes, which would indicate that two different plates were used. The error consists of the word "echanger" misspelled as "echarger". The assignat issue is rare; however, the notes of the second issue occasionally surface to this day.

The Siege of Lyon

The French city of Lyon is situated at the confluence of the Rhone and Saone Rivers. The city dates from 43 B.C. when the Romans built their town of Lugdunum on the hill overlooking the two rivers. After the defeat of the Gauls, Lyon became a transportation and communications center with roads radiating from it to far-flung parts of Europe. Faithful to the French crown during the Hundred Years War, Lyon's wealth increased until it became the leading financial center of France. By the time of the French Revolution this prosperity had been lost due to a succession of religious wars, thus precipitating an economic crisis.

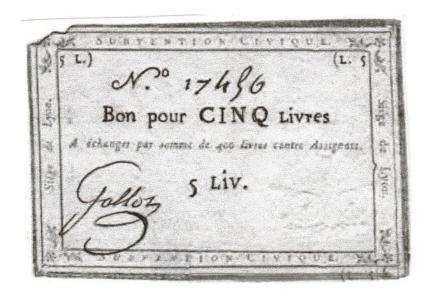
Lyon strongly supported Louis XVI and the royalists, becoming a bastion of resistance. During the Reign of Terror (1793-1794) Robespierre, at the head of the revolutionists, sent commissioners into the provinces to suppress these

counter-revolutionary movements. They were often responsible for extreme acts of terrorism in their districts, perpetrating horrors upon those considered disloyal.

Unlike Mainz, whose fortress was defended by the revolutionaries while under siege by pro-Louis XVI Austrian-Prussian forces, the siege of Lyon pitted Frenchman against Frenchman - republicans against the defending royalists. In August 1793 a law was passed by the Assembly, which called for the conscription of the entire male population capable of bearing arms. Fourteen armies were hastily organized and put into the field. The following month another law was passed which called for a table of maximum prices, which could be paid for certain commodities, as well as a freeze on wages. This system prevented the catastrophic fall of the assignat thus assuring the continued provisioning of the armies. It was in this climate that the revolutionary army surrounded Lyon, subjecting it to siege. The siege, however, was short lived, lasting only from 8 August to 9 October 1793. After a short defense, the royalists surrendered to the republicans. Bent on revenge, the peasant army partially destroyed the city, after which large numbers of the inhabitants were massacred. Two thousand citizens were either guillotined or shot.



Unlike Mainz, whose fortress was defended by the revolutionaries, the siege of Lyon pitted republicans against the defending royalists. After the fortress of Mayence fell to the Prussians, the French garrison was allowed to march out of the fort with honor. Lyon's defenders were not so lucky, however. After the peasant army destroyed the city, 2000 royalists were put to death by guillotine. Shown here is a Lyon siege note for 25 sous.





Money of necessity issued during the Siege of Lyon. These 5 and 20 livres notes were prepared in August 1793 from paper manufactured originally for use by the "Caisse Patriotique de Lyon". The left-over paper used for the 20 livres contained a fleur-de-lis royal watermark in the lower right corner. The 20 livres note is always found sans watermark which was removed by clipping. Both notes state that they may be exchanged against 400 livres in assignats of the Republique Francais. A single "Galloz" signature (one of several used) appears on the 5 livres, while all 20 livres notes bear the signatures of monsieurs Choppin and Quittous.



This 400 livres assignat, dated 21 November 1792, was one of the first notes released under the French Republic. The portrait of Louis XVI has been removed in favor of the fasces and liberty cap, symbols of the revolution. This is the note referred to as being exchangeable for the siege money of Lyon.

Quite a few notes have survived from the siege of Lyon. Denominations consist of 25 and 50 sous and 5 and 20 livres, printed on heavy off-white paper. Considerable effort went into the production of these notes. The notes are uniface. All notes carry the caption "SIEGE DE LYON" together with the phrase "Subvention Civique" which translated can mean "municipal subsidy" or "civic grant". The 25, 50 sous and 5 livre notes have but one handwritten signature while the 20 livre note has two. More than one individual was employed in signing the lower denomination notes as the different signatures attest.

The notes were further authenticated by the addition of dry seals bearing the arms of Lyon; one on 25, 50 sou and 5 livre notes whereas two seals are found on the 20 livres specimen. All have ornamental black borders containing floral, fleur-de-lis or diamond designs. The phrase "Bon pour VINGT-CINQ Sous", etc. appears at the center beneath which are a variety of qualifying statements such as "A echanger par somme de 400 livres contre Assignats" (Exchangable up to the

sum of 400 livres in assignats). The 400 livre assignat dated 21 September 1792 was at that time the largest banknote in circulation in the French Republic.

The livre notes were hand numbered, whereas the sous were not. The twenty livres notes were printed on watermarked paper, each sheet bearing the words "Caisse Patriotique de Lyon" (Patriotic Bank of Lyon). When cutting the sheet only one word would appear on each note, therefore some watermarks read "Patriotique", some "de Lyon" and others "Caisse". All surviving examples of the twenty livre siege note have been cancelled with shears thereby removing the lower right hand corner of the note.

The Siege of Mantova

The city of Mantova (Mantua), in Lombardy, came under siege during Napoleon's Italian campaign. Mantova commenced as a Roman town gaining the status of a free city under the Gonzaga family in the thirteenth century. Mantova passed under Austrian control in 1708.

It was during the French Revolution that the promising French officer, Napoleon Bonaparte, rose through the ranks of the army. He was named a general in 1793. From that point onward Bonaparte's power grew rapidly. The French executive body, known as the Directory, hoped to end the war on the continent by an advance upon Vienna. They created the Army of the Alps and the Army of Italy to play a secondary role by attempting the conquest of Piedmont and Lombardy, thereby forcing Austria out of the war. Napoleon Bonaparte was given command of the Army of Italy. He proved to be a military genius with great ambition. By May 1796 he had conquered all of Lombardy as far as Mantua, whereupon he set up the Lombard Republic. Pushed eastward, the Austrians abandoned their defensive line along the Mincio River, retiring to the strong fortress of Mantova. Their departure from the field allowed Napoleon's army to release 40,000 men with which to invest the Austrians at Mantova. The siege commenced on August 27, 1796.

Four attempts were made by the Austrians to relieve the French siege of Mantova's fortress. On their fourth attempt they were defeated at the battle of Rivoli. The fortress and its 14,000 defenders then surrendered thereby ending the siege on 2 February 1797. Total Austrian casualties were 7,000 killed and 6,000 wounded.

After Mantova fell, the French entered the Papal States on their march to Rome. After the Dukes of Parma, Modena and the King of Naples had all



During Bonaparte's Italian campaign in 1796, the Austrian garrison at Mantova was besieged by French forces. While under siege, the Austrians issued a series of notes to sustain their economy. Shown here is the 18 lire note bearing Austria's arms. The date is depicted as "6 Ottobre 17 novanta sei".

purchased truces with large payments from their treasuries, the Pope then hastily concluded the Treaty of Tolentino with Napoleon, saving Rome at the cost of ceding the northern provinces to France. Mantova was eventually retaken by the Austrians in 1815, and returned to Italy in 1866.

Mantova siege notes are uniface and printed on white paper. All have two red Austrian imperial seals above the text which reads: "Cedola di (Dieciotto) Moneta di Mantova spendibile come effectivo danaro in ogni Cassa, e da ogni persona a norma dell'Editto di questo giorne. 6 Octobre 17novanta sei." (Coupon of {18} lire in Mantova emergency money spendable by all persons everywhere in the fortress, by regulations published this day. 6 October, 1796).

The notes were issued in denominations of 10 soldi and 1, 3, 6, 9, 12, 18, 45, and 135 lire, which were comparable to those in use in the Papal States at the time. All are hand signed and numbered.

The Siege of Colberg

During the Wars of Liberation which followed Napoleon's catastrophic 1812 invasion of Russia, the Prussians soon deserted their former French allies, joining

forces with the Tsar to drive the French army from Germany. Prussia's king, Frederick Wilhelm III, called upon his people to form volunteer corps to assist in expelling the French. Napoleon directed his army to take and hold the Prussian fortresses as a buttress to the Prussian-Russian advance. Colberg and Erfurt were two of these fortified sites.

The impending conflict found the old fort at Colberg ill prepared. It's ramparts held only eighty-six pieces of antiquated artillery. Artillerymen were in such short supply that each piece was manned by a single soldier. The garrison, of one thousand soldiers were of such poor quality that they were deemed unfit to serve with the regulars.

In past wars, Colberg had come under three separate attacks, each one successfully repulsed. This was because in times of strife, the citizens of the town had volunteered to man the walls along with the soldiers, an act which had become a tradition in Colberg. As the French advanced, an old seaman named Nettelbeck called together his volunteer militia, presenting them to the fortress Commandant. The Commandant, who had little use for civilian militia, sent them home whereupon Nettlebeck began working behind his back to prepare the town for the struggle that would surely overwhelm them. Taking an inventory of the available food supplies, Nettlebeck quickly discovered that they were insufficient for a protracted siege. When bringing this information to the Commandant's attention, he was insulted and again sent away.

When the French arrived before the fortress on March 15, 1807, they sent a flag of truce to the Commandant to discuss surrender. The secret meeting between the Commandant and the French lasted many hours. Suspecting treachery, Nettlebeck hurriedly sent a letter to Frederick Wilhelm informing him of the situation, whereupon the king promised to send a leader with more mettle to defend Colberg. While the Commandant was walking in the marketplace a few weeks later, some bombs exploded harmlessly nearby. The commander of the fort stammered "If this continues we shall have to surrender"! Upon hearing this, Nettlebeck drew his sword and accused the Commandant of treason. In turn the Commandant ordered Nettlebeck arrested

On April 29, 1807 the Commandant was replaced by the king's representative, Gneisenau, who promptly ordered Nettlebecks release. Gnesisenau turned out to be made of sterner stuff. He was determined to give the besiegers no peace day or night. For this he had prepared a plan. Drawing upon a force of Prussian soldiers under General Schill, which had just been released after the battle

of Jena, Gneisenau planned a series of raids upon the French rear, which kept the besiegers from overwhelming the fortress and otherwise occupied. As more loyal men from Jena arrived, the garrison at Colberg was increased to 6,000 men.

The siege grew more difficult for the defenders as the French crept closer and closer as each new parallel was dug. The bombarding artillery inflicted great harm to the town as barely a house could be found with a window-pane intact. Before a truce was announced on July 3, 1807, the siege had claimed 2,000 men killed or wounded.

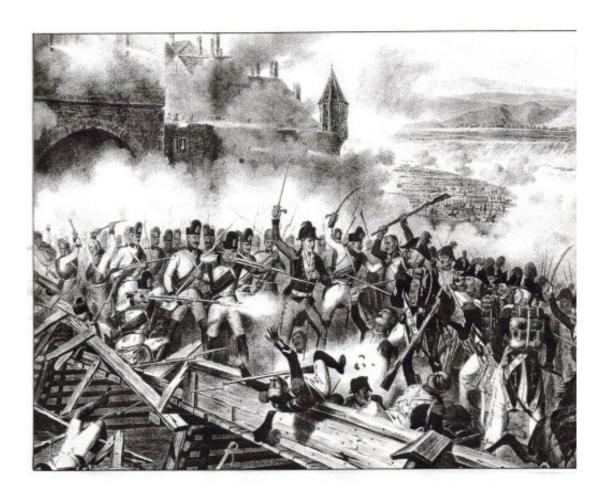
On June 25, 1807 Napoleon and Frederick Wilhelm concluded an agreement calling for the cessation of hostilities. The French knew of this; however they did not see fit to inform Gneisenau and the besieged garrison, choosing instead to continue their desperate attempts to subdue the fortress. The fort at Colberg was able to hold out until the arrival of representatives of the peace commission. Gneisenau proved that free citizens and garrison troops, properly motivated, could unite to defeat the enemy when called upon to do so.





Colberg, a Prussian fortress, was besieged by the French at the height of Napoleon's conquests. The note seen here is an 8 groschen specimen dated 1807. The king's seal on the reverse reads: "Kon. Preuss. Gourernement zu Colberg". All notes were completely handwritten. A total of 13,000 two groschen; 7,400 four groschen and 8,650 eight groschen notes were issued.

Two issues of siege notes were issued at Colberg during the siege. The first of these were known as "Kommissions Kupons", so named as they were authorized by the Prussian Coin Commission. The notes are entirely handwritten on cardboard, serially numbered, and contain five signatures. Denominations were for 2, 4, and 8 groschen. All are dated "Colberg 1807". The reverse of each note



The assault upon Edelsberg at the height of Napoleon's campaign in 1809. Here French troops attempt to force the bridge approach to the Austrian fortified town.

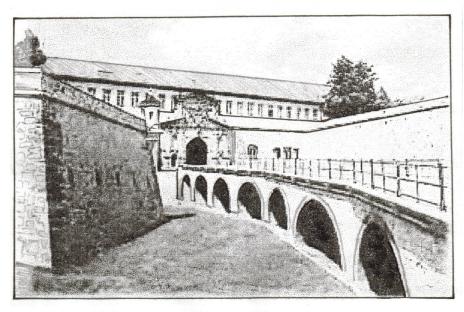
carries an oval seal, which bears the inscription "Kon. Preuss. Gouvernement zu Colberg".

The second issue was known as "Meinecke Kupons", named after the Counselor of War and Crown Lands. They contain only three signatures and are in all other respects the same as the first.

The Siege of Erfurt

Petersberg Citadel in Erfurt had been an imposing fortress since June 1665 when its cornerstone was laid. It took only three years for Italian laborers, working under master stonemasons, to complete the structure. The fort consisted of four mighty bastions with a massive baroque portal. From its inception the fortress

served as a place of worship, as the site of a castle, a monastery, and a place of refuge in time of trouble.



The fortress at Erfurt, showing a baroque entrance gate. The French occupying forces were besieged there in 1813 by the advancing Prussian army.

Soon after his catastrophic invasion of Russia in 1812, which ended with the French Army in full retreat from Moscow, Napoleon directed that the citadel be strengthened. Under the supervision of the French master builder, Vauban, an additional four bastions were added and other reinforcements made. These improvements were put to the test on only one occasion. After the siege in 1813, the victorious Prussians further reinforced the fort to accommodate a new guardhouse, a defensive barracks, gunpowder stores, wells and a bombproof bake house. Today Petersberg fortress is one of the few citadels whose important structures have been preserved thus affording us an opportunity to study siege craft design from the 17th-19th century period.

Prior to Napoleon's Russian debacle, the Prussians had allied themselves with the French, primarily to gain a kind of neutrality. To achieve this, Prussia had to agree to provide 20,000 men to assist the French army. After the failure of the Russian campaign, the Prussians deserted the French, joining the Russians in a campaign into German and France.

Erfurt had been under French domination since 1806. The Prussian proclamation of war against France initiated a general uprising in northern

Germany against Napoleon. The French forces at Erfurt were then besieged by the Prussians from November 1813 to May 1814. The besiegers vastly outnumbered the French garrison in the fort. As the Prussians and Russians chased Napoleon back across the Rhine, one city after another fell. Leipzig, Dresden, Stettin and Danzig all succumbed; however Erfurt remained in French hands until the conclusion of peace with the signing of the First Treaty of Paris on May 30, 1814. Napoleon renounced his imperial position and was banished to the island of Elba the following month, thus ending the Napoleonic war era.

As the advancing Prussian forces set up their siege of Erfurt in November 1813, the French, being cut off from outside financial assistance, found it necessary to issue siege money in groschen and thaler denominations. The notes, all bearing the date November 1, 1813 are printed in black on white paper. Fractional notes consisted of 2, 3, 4, 8 and 12 groschen; the higher denominations in increments of 1, 2 and 5 thalers.

Of all the siege notes the Erfurt series display the best design and workmanship. All notes carry the inscription "BLOKADE VON ERFURT" as a heading. These notes have elaborate border designs, some floral and some geometric. Other features include dry authenticating seals and elaborate counterfoils at the left of the note. A few notes contain the printer's name, that of Johann Immanuel Uckermann, beneath the right border.

The Siege of Zara

Zara was a Napoleonic garrison besieged by the Austrians. Known now as Zadar, the city is a port on the Dalmatian coast of present day Croatia. Zara has had a turbulent history. Situated where Europe meets the East, its origins go back to the Roman colony of Jader founded there in the second century B.C. After the fall of the Byzantine Empire Zara was transferred to Venice. During the Fourth Crusade the city was sacked by the Venetians and Crusaders after a five day siege, an act condemned by Pope Innocent III. Wars between Venice and Croatia continued for the next three hundred years for control of the Christian city of Zara. Napoleon's Italian campaign ended in 1797. After the fall of Venice, the treaty of Campo Formino awarded Zara to Austria.

In 1804 the French republic gave way to the First Empire. Napoleon was declared emperor for life by the Senate, taking the title Napoleon I. He declared himself King of Italy the following year. After the defeat of the Austrians at the battle of Austerlitz, Napoleon's greatest triumph, Austria was forced to cede





The French garrison at Erfurt found themselves besieged by the advancing Prussian army after Napoleon's retreat from Moscow, making an issue of siege notes necessary. The fortress was besieged from November 1813 until May 1814 when the Prussians finally prevailed. Shown here are the 3 groschen and 2 thaler siege notes. Erfurt's money of necessity is of a superior workmanship and design, which suggests that complete printing facilities must have been available to the besieged forces.

all lands acquired earlier from the Venetian Republic to the Kingdom of Italy.

France subsequently established garrisons in all the empire's outposts. On 26 December, 1805 Dalmatia was awarded to France by the Bresslau Peace Agreement. The French arrived on February 18, 1806 taking control of the fort at Zara in the name of the Kingdom of Italy.

The French troops in Zara were besieged by the Austrians on 12 August 1813 when Austria, emboldened by the French army's decisive defeat in Russia, again declared war on France. An alliance was formed between Prussia, Russia and Austria to drive the French from Europe, not stopping until they reached Paris. The French garrison at Zara capitulated to the Austrians in October 1813 after a siege of several months during which time the fortress was continuously shelled. The surrender of Zara to Austrian and English forces began the second period of Austrian authority, which was to last until the fall of the Austrian monarchy in 1918.

Only two Zara siege notes are known, both extremely rare, if not unique. They are in the amount of 1 and 2 francs. Undated they are printed in black on white paper bearing a brownish-red seal. The notes state that they may be exchanged for Venetian lire.

The First Siege of Palmanova

Palmanova, located in the former Venetian Republic, and now part of Italy, was a fortified town shaped like a nine-pointed star. It was founded by Venice at the end of the sixteenth century as a means of defending their eastern border from attacks by Turks and the Hapsburg Austrians. During prior Turkish invasions, the plains of northern Italy had been overrun followed by widespread sacking and looting, thus confirming the need for a sound defense in the east.

The new fortress arose on the sight of an old village named Palmada, and was named Palmanova in remembrance of this ancient place. The project was overseen by a group of military engineers and architects who worked for the Venetian Fortifications Office. Under their direction, a double barrier defense system was erected around the star shaped city. These outer defenses included ramparts, moats and ravelins so designed as to shelter the city's three access gates. Founded in October 1593, the fortress of Palmanova was dedicated on the twenty-second anniversary of the Venetian naval victory at Lepanto, a decisive Venetian

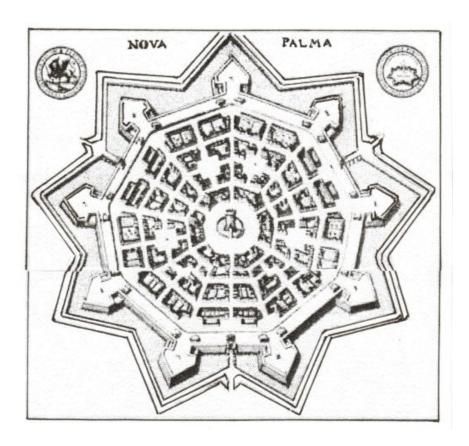
victory over the Turkish fleet. Today Palmanova stands as one of the few remaining intact examples of a fortified town to be found in Europe.

The fortress remained under Venice's control until the decline of the Venetian Republic in 1797, whereupon the Austrians occupied the city, retaining possession until 1805. The fortress's downfall came about in an interesting way. An Austrian major had gained entrance to the fort by deception, opening it from within to a thousand armed soldiers who were waiting out of sight outside the gate.

When France declared war on the Venetian Republic her troops occupied most of the country. After the Austrian defeat by Napoleon at Austerlitz, a truce was signed in 1805 ceding Palmanova to France. The French garrison immediately set about strengthening and enlarging the fortifications. Napoleon personally directed the destruction of three towns adjacent to the fort, which could have served as vantage points for a besieger. This denied cover to the enemy during artillery cannonading while enabling the engineers to construct a third external circle of defenses around the fortress. The French occupation of Palmanova lasted from 1805 to 1814.

In 1813 Austria formed an alliance with Russia, seized upon the opportunity presented by the Napoleonic army's resounding defeat and subsequent retreat from Moscow, and re-entered the war against France. During the Austrian siege of 1813-1814 Palmanova proved to be a storm proof fortress. The defending French garrison and Napoleon's far-sighted renovations had proven too great an obstacle for the besiegers. Following Napoleon's banishment to the island of Elba, Palmanova again reverted to Austrian rule under which it remained until Italian independence in 1866.

The 1814 issue of siege notes consisted of four handwritten, hand-numbered uniface bills on laid paper bearing the inscription "CARTA MONETATA" at the top. The four denominations of 2, 5, 10 and 25 lire notes are stated as "Due Lire Due", "Cinque Lire Cinque", etc. Each note contains two seals one black, in Italian with the date stated as "1814", the other a blue seal in French which reads "Siege de Palma Nova" together with the Napoleonic French eagle. All 1814 Palmanova siege notes are extremely rare.





Palmanova as it appeared in 1797 at the time of its occupation by Napoleon's army (above), and a modern aerial view of Palmanova's fortress city as it appears today (below).

The Second Siege of Palmanova

Palmanova boasted the distinction of being besieged not once but twice! These events occurred thirty-five years apart. The second siege occurred as a result of the Italian War of Independence. With the collapse of the Napoleonic Empire in 1814, the Italian peninsula was broken up into nine independent states: the Kingdom of Sardinia (Piedmont), Tuscany, the Papal States, Kingdom of Naples, the Republic of San Marino, Modena, Parma, Lucca and Monaco. The last five were little more than city states which had managed to maintain their separate Except for the annexation of the former Venetian Republic by Austria and the incorporation of Genoa into Piedmont, things remained pretty much as they had been prior to the Napoleonic Wars. These new states were effectively dominated by Austria from 1815 to 1848. Lombardy and Venetia were annexed in their entirety by Austria. During this period the Italian independence movement flourished. Dissatisfied with Austrian rule, Venice and Milan revolted in 1848. Barricades were thrown up in the streets forcing the Austrians to retreat to their inner circle of fortifications, thereby preventing the Italians from communicating with the outside world. Although generally disorganized, the rebels greatly outnumbered the Austrian forces. The Italian patriots managed to take command of the vacated fortress at Palmanova. This was made possible because the Austrian general, Radetzky, was forced to concentrate his defense in the four fortresses of Mantua, Peschiera, Legnano and Verona. The Austrians then invested Palmanova in April, 1848, keeping the patriots under siege until 24 June, 1848. Ravaged by cholera and facing starvation, the city of Venice surrendered to the Austrians, thereby bringing about an end to the Italian War of Independence. It was to be several more decades until Italy would finally be unified.

The second siege of Palmanova has left us with several numismatic rarities. In 1848, the patriot defenders issued a series of siege notes in denominations of 25 and 50 centesimi and 1, 2, 3 and 6 lire. All are printed on heavy white watermarked paper. The lire values carry the inscription "Carta Monetata per lire una (1), due (2)", etc. The issuing authority is stated as "Commissione di Finanza della Fortezza" (Board of Finance of the Fortress). An oval hand-stamped seal completes the design. It was applied by the "Commissionedi Finanza Palmanova Instato d'Assidio – 1848" (Finance Commission for the Palmanova Siege – 1848). Four hand signatures attest to the notes authenticity.

Perhaps the most interesting feature of the 1848 Palmanova issue is their tricolor appearance. The notes were printed in black, the values in red and the date

in green, thus necessitating three trips through the printing press. The production of these notes in red and green printed on white paper made a patriotic statement also.



Siege notes from the Italian War of Independence. When the Italian patriots rebelled against Austria in 1848, northern Italy was overrun, forcing the Austrians to abandon their fortifications. The forts at Palmanova and Osoppo were then occupied by the patriots, who were in turn besieged by the Austrian army. Necessity money was issued, while besieged, for the garrisons at Palmanova (above) and Osoppo (below). Both fortresses capitulated seven months later.



Handwritten 2 lire siege note of Osoppo.

The Siege of Osoppo

Little is known of the fortress at Osoppo other than its location at the foot of the Alps in Italy's most northeastern province. It too was one of the fortresses abandoned by the Austrians in order to consolidate their inferior forces at Mantua and Verona. The Italian patriots took over the unoccupied fortress in March 1848, remaining there under siege for seven months before capitulating.

During the time the Austrians laid siege to the fortress at Osoppo the Italians released a total of seven siege notes. These were denominated 50 centesimi, 1, 2, 3, 6, 50 and 100 lire. Undated, the notes were completely handwritten except for three black hand-stamps, including one of the Commander of Artillery and one for the Commandant of the Fort. Osoppo siege notes are exceedingly rare.

In Part II of this article we shall shift our focus from Europe to Africa, where all but one of the remaining sieges under discussion, were located. It is interesting to note that the art of siege warfare, developed in the Old World, soon followed European expansion into their new colonies. Only the places listed in Part II issued money of necessity to alleviate the hardships brought about by siege, however. In Part II we shall discuss the siege of Khartoum where General Gordon's forces were annilhilated on the Upper Nile, the Boer War sieges of Koffyfontein, O'okiep and Mafeking – the latter chronicling Colonel Baden-Powell's successful stand of 217 days before being relieved by a British column, and finally the last known siege involving the issue of paper money at Scutari, in present day Albania.