

J. W. PEPPER'S

GRAND CLASSIC CORNET SOLOS

WITH Piano Accompaniment

FANTASIAS.

Robin Adair,.....	By J. S. Cox
Irish Airs,.....	"
Auld Lang Syne,.....	"
I Cannot Sing the Old Songs,.....	"
Brilliant,.....	Arban
Nearer My God to Thee,.....	J. S. Cox
Shells of Ocean,.....	"
Bohemian Girl,.....	"
Coming Thro' the Eye,.....	"
Religious Fantasia,.....	T. H. Rollinson
Original,.....	C. Riggs
Jesus, Lover of my Soul,.....	J. S. Cox
A Violet from Mother's Grave,	"
Old Black Joe,.....	"
Battle Cry of Freedom,.....	A. Liberati
Old Folks at Home,.....	J. S. Cox
Sweet Spirit Hear my Prayer,.....	"
Sweet By-and-Bye,.....	"
Killarney,.....	"
Come Back to Erin,.....	"
Flee as a Bird,.....	"
Safe in the Arms of Jesus,.....	"
Fra Diavolo, (Fantasia Brilliant).....	"
Masaniello, (Fantasia Brilliant).....	"

AIRS WITH VARIATIONS.

Thomas' 1st Air and Variation,.....	By E. S. Thomas
Tyrolle Air Varied,.....	Arban
Annie Laurie, Scotch Air with Variations, Arr. by C. Riggs	
Chant d'Amour, Air and Variations,.....	J. Forestier
Facilita, Air and Variations,.....	J. Hartman
Alexis, Air and Variations,.....	Hartman
De Berliot's 7th Air with Variations,.....	Hartman
Home, Sweet Home,.....	T. H. Rollinson
Carnival De Venice,.....	J. Dodsworth
Blue Bells of Scotland,.....	"
Last Rose of Summer,.....	R. Smith
America and Variations, in Four Octaves, W. Northcott	
De Berliot's 6th Air, with Variation's,.....	Hartman
Thomas' 2d Air with Variations,.....	E. S. Thomas
The Favorite,.....	J. Hartman
The Mocking Bird,.....	J. S. Cox
German Air,.....	Bosio
Longing,.....	Meyer Lutz
Dulcinea,.....	J. Forestier
Columbianus, (Schottische Air and Var.) Chas. E. Bray	
Bagatelle,.....	A. Coquelin
Air Varie,.....	Schneider
Souvenir du Poituo,.....	J. Legendre
Mayseder's,.....	J. Hartmann
Souvenir de France,.....	H. Koenig

MARCHES.

Wedding March,.....	By Mendelssohn
Tramerei, (Romanza), by R. Shuman and	
Chopin's Funeral March,.....	F. Chopin

NET PRICE, 50c. EACH.

GRAND SELECTIONS.

La Perichole,.....	By J. S. Cox
H. M. S. Pinafore,.....	Sullivan
Olivette,.....	Audran
Bohemian Girl,.....	Balfe
Billee Taylor,.....	Solomon
Suppe's Bocaccio, (From).....	Arr. by E. C. Walston
Princess Toto, (From).....	Clay, Arr. by J. S. Cox
Pirates of Penzance, (From).....	Arr. by Stobbe
Splinters, (Grand Musical Smash-Up).....	T. H. Rollinson
The Mascotte,.....	Audran
The Winds that Waft my Sighs to Thee,	
As played by J. Levy,.....	W. V. Wallace
The Mascotte,.....	Audran
Martha,.....	Flotow
Patience,.....	Bowman
Romance from "Il Pirata,".....	W. H. Hawkes

WALTZES.

Toujours on Jamais, (Ever or Never),	
By Emil Waldteufel	
Tres Jolle, (Charming).....	"
La Plus Belle Waltzes,.....	"
The Sweet Flower, (Concert),.....	J. S. Cox
The Approach of Spring,.....	Zikoff
Fantastic,.....	"
Sounds from the North,.....	"
Remembrance of Venice, (Concert),.....	J. S. Cox
To Thee—"A Toi,".....	Emil Waldteufel
Weber's Last,.....	"
Blue Alsatian Mountains,.....	Lamotte
Pirates of Penzance,.....	A. Sullivan
Marabella,.....	F. J. Keller
Les Sirenes,.....	E. Waldteufel
Tout A Vous,—"Thee Alone,".....	"
Highland Echoes, (Concert),.....	C. Damarre
La Plus Belle,.....	Emil Waldteufel
My Dream,.....	"
My Charmer,.....	"
Shower of Gold,.....	"
Hours of Joy,.....	"

CAPRICES.

Canzona Italiana,.....	By A. Liberati
Mazurka Caprice,.....	Hartman
Solitude,—An Original Caprice,.....	Mercadante
Caprice and Variations,.....	J. Arban
Raphala,—Tereschek,.....	J. S. Cox
Souvenir de Valance,.....	Bleger
Cornet Triumphant,.....	Chappelle
My Heart and Lute,.....	Woodman
Remembrance,.....	Lagny
Morceau De Concert,.....	Woodman
Le Reve d'Amour, (Dream of Love),.....	H. Millars
Canzona Napolitana,.....	A. Liberati
Andante—Etude de Concert,.....	J. S. Cox
Serenade, J. A. Owen,.....	Prendville
The Wind that Waft my Sighs to Thee, H. Prendville	
Undine,.....	Resch

POLKAS.

Lucky Hit,.....	By J. S. Cox
Minerva,.....	Hermann
Autograph,.....	Meyer
Washington Guard,.....	H. Miller
Josephine,.....	J. S. Cox
Le Trompette Des Cent Gardes,.....	Bosquet
La Parisienne,.....	Ligner
La Perle du Mere,.....	G. M. Spencer
La Vallence, Ascher,.....	Arr. by Willis
Perronnelle,.....	E. Marie
Cleopatra,.....	R. Hungerford
Anna,.....	Legender
Promenade,.....	Levy
Skirmish,.....	J. Hartmann
The Globe,.....	Godfrey
Alexandria,.....	J. M. Steeneberger
The Favorite,.....	C. Riggs
Artic,.....	J. S. Cox
Roselle,.....	"
Gorrillacum,.....	B. squet
Lydia,.....	Herve
The Spring,.....	Fartman
Agamemnon,.....	P. Koenig
Brilliant Stars,.....	E. S. Thomas
Xenophen,.....	J. Hermann
Atlantic Garden,.....	A. Liberati
Des Guides,.....	J. Arban
The Ideal Polka,.....	J. S. Cox
La Bella Romana,.....	Sig. A. Liberati
Il Caporale Di Settimana,.....	"
La Bella Frascatana,.....	"
Ideal,.....	J. S. Cox
Terpsichore,.....	A. Zanichelli
Diamond Polka,.....	R. Hungerford
Argonaut Polka,.....	J. S. Cox

OVERTURES.

Elks Reception,.....	By J. S. Cox
Chimes of Normandy,.....	"
Fatinitza,.....	"
Hippodrome,.....	T. B. Boyer
Le Bladem,.....	Hermann
Lustspell,.....	Kela Bela
Chevalier Breton,.....	A. Hermann
Poet and Peasant,.....	F. V. Suppe
Crown of Gold,.....	Hermann
Babes in the Wood, (Medley),.....	Zimmerman
Nauvete, (Medley),.....	Walston
National Airs, (Medley),.....	"
Irish,.....	F. R. Williams
Don Quixotte,.....	J. Hermann
Jolly Robbers,.....	Franz Von Suppe
Enchantment,.....	J. Hermann
A Day at Coney Island, (Medley),.....	"
Scotch Airs,.....	J. S. Cox
Golden Harp,.....	Frank Schaefer
The Mastodon,.....	E. Brooks
Topophone,.....	Frank Schaefer
Mixtures,.....	E. Brooks

ANY 5 FOR \$2.00 NET.

Published by **J. W. PEPPER**, Philadelphia, Pa.
 S. W. Cor. Eighth and Locust Streets.
 Band, Orchestra and Sheet Music Depot.

OVERTURE - "HEROIC"

Solo Cornet in A.

Fr. SCHAEFER.

Risoluto

Tempo di Valse.

The musical score consists of 15 staves of music. The first staff begins with a treble clef, a key signature of one sharp (F#), and a common time signature (C). The tempo is marked *Allegro 3*. The score includes various musical notations such as eighth and sixteenth notes, rests, and dynamic markings like *ff* (fortissimo) and *poco meno*. There are first and second endings indicated by bracketed lines with '1' and '2' above them. The piece concludes with a final cadence on the fifteenth staff.

Pub. by J.W. PEPPER Phila Pa

OVERTURE - "HEROIC"

Piano.

Fr. SCHAEFER.

Risoluto.

ff con forza

p

f *p*

rall

Allegro con brio.

rit *p*

accel.

rit. *a tempo.*

meno mosso

p

ff

f

Tempo di Valse.

p

p

p

p

Allegro.

f

p

f

Pub by J W PEPPER, Phila. Pa

Pub by J.W.PEPPER Phila Pa

The Greatest Thing Ever Published.
THE AMERICAN SOLOIST

(In Two Volumes.)

A CHOICE COLLECTION OF

Solos, Cornet Polkas, Airs and Variations,
 By the Greatest Writers in the World.

FOR

CORNET or ALTO
 (ALONE).

MAY ALSO BE USED FOR

TENOR or BARITONE

Or Any Valve Instrument Using Treble Clef

In order to introduce these fine compositions, we have divided them in Two Volumes, so that we are able to sell them at the following Low Prices. Gotten up on Large Size Music Plates, Full Music Size. Printed on the Best Tinted Paper. Elegantly bound in the best manner.

Single Volume \$1.00 Net.

Or Both Bound Complete for only \$1.50 net

We would earnestly recommend these to the Young Artist making the Cornet his Study, as well as the professional Soloist, for they will be found to contain the best class of Music ever before published, either in Europe or America.

VOLUME 1 CONTAINS.

- | | |
|---|--------------|
| 1. Air and Var.—"Fleur de Rosee," | Blancheteau |
| 2. Air and Var.—"Les Fleches Eolines," | Guilbert |
| 3. Air and Var.—"Enchanted Cornet," | Malezieux |
| 4. Fantasia.—"Une Soiree a Monaco," | M. Blegier |
| 5. Scena.—"Ah, Yes! Thou'rt Mine Beloved," | Verdi |
| 6. Air and Var.—"Le Defi," | P. Clodomir |
| 7. Air and Var.—"Les Douttes D'Or," | Blancheteau |
| 8. Aria.—"Only," | G. F. Davis |
| 9. Obligato.—"Andante and Cavatina," | Schubert |
| 10.*Air and Var.—"The Last Rose of Summer," | Smith |
| 11. Cavatina.—"Light of Home," | Donizetti |
| 12. Air and Var.—"Le Meteor," | Bancourt |
| 13. Thema.—"Le Messager De La Reine," | Reynold- |
| 14. Air and Var.—"Le Carroussel," | E. Marie |
| 15. Aria.—"The Swallows," | Abt |
| 16. Air and Var.—"The Ash Grove," | G. F. Davis |
| 17.*Air and Var.—"Blue Bells of Scotland," | J. Dodsworth |
| 18.*Air and Var.—"Carnival de Venice" | F. Dodsworth |

VOLUME 2 CONTAINS.

- | | |
|--|-----------|
| 19.*Solo Polka.—"La Parisienne," | Ligner |
| 20.*Air Varie.—"Remembrance," | Lagny |
| 21.*Air Varie.—"Souvenir de Valence," | Blegier |
| 22. Cavatina.—"Com-me Per Me," | Bellini |
| 23. Cavatina.—"Vi-rav-vi-so," | Bellini |
| 24. Aria.—"Ple Aux Cleres," | Harold |
| 25.*Air Varie.—"Morceau de Concert," | Woodman |
| 26. Scena and Aria.—"Lucia," | Donizetti |
| 27. Aria.—"Softly Smiles Love's Golden Summer" | W. Sim- |
| 28. Cavatina.—"Come Innocente," | Donizetti |
| 29.*Air Varie.—"Cornet Triumphant," | Chappelle |
| 30. Cavatina.—"Com E Bel-lo," | Donizetti |
| 31.*Air Varie.—"My Heart and Lute," | Woodman |
| 32. Ballad.—"I See Thee in My Dreams," | Calkin |
| 33.*Solo Polka.—"Perronelle," | Marie |
| 34. Andante and Allegro.—"Atilla," | Verdi |
| 35. Fantasia Varie.—"La Belle Suisse," | Quentin |

Single Vol. \$1.00. Both Complete only \$1.50 Net

N. B.—Pieces marked with a Star are also Published Separate for Cornet and Piano. Price 50 cents each net.

J. W. PEPPER, PUBLISHER.

Cornet {or Alto} Duets.

25 **SPLendid DUETTS**, for 2 Bb's (By Bonnisseau). 50c., Net
 Gotten up easy, with Fingering Marked. Splendid for teaching.

8 **GRAND DUETTS**, for 2 Bb's (By Bonnisseau).....50c., Net
 Similar to the above, but a little more advanced.

CORNET (Or Alto) DUETTS,
 ON AIRS FROM SIX DIFFERENT OPERAS.
 By H. Koenig. For 2 Bb Cornets.

- | | |
|---------------------------------|----------------------------------|
| 1 Massaniello.....Auber | 4 Nozzi di Figaro (No.2). Mozart |
| 2 Nozzi di Figaro (No.1).Mozart | 5 Le Prophete.....Meyerbeer |
| 3 Jesonda.....Spohr | 6 La France.....Auber |

Price 35c. Each Number, or the 6 Numbers Bound Complete, \$1.50, Net.

J. W. PEPPER, Publisher,
 S. W. Cor. Eighth & Locust Sts., Philada. Pa.

THE ARTIST'S
REPERTOIRE

A Choice Collection of

SONGS

ARRANGED AS CORNET SOLOS

BY

WIEGAND, KOPITZ, COX and Othe.

With Parts for

Large and Small Orchestras

AND

PIANO ACCOMPANIMENT.

Engraved in the Best Style on Large Size Music Plates Full Music Size.

Large Orchestra, 14 Parts. Including Piano, \$1.00 Each Number
 Violin, Cornet and Piano, 65 cts. " " "

Small Orchestra, 10 Parts Including Piano, 75 cts. Net
 Cornet and Piano, 50 " " "

Each Number will contain Two Songs, arranged in the best style, with Introduction and Coda. Just the thing for Concert and Theatre Business.

CONTENTS.

- | | |
|---------------------------------|-------------|
| 1. { Exiles Lament. | Albert |
| { Ye Merry Birds, | Abt |
| 2. { Star of Love, | Wallace |
| { Power of Love, | Balfe |
| 3. { Birds in the Night, | Sullivan |
| { Sleep Well Sweet Angel, | Abt |
| 4. { Sing, Smile and Sleep, | Gounod |
| { Sweet Evening Star, | Wagner |
| 5. { Auld Robin Gray, | French |
| { I Would That My Love, | Mendelssohn |
| 6. { Schubert's Serenade, | Schubert |
| { Non e Ver, | Mattei |
| 7. { Once Again, | Sullivan |
| { Let Me Dream Again, | " " |
| 8. { Within a Mile of Edinboro, | Scotch Song |
| { The Image of the Rose, | Reichard |
| 9. { Robin Adair, | French |
| { Kathleen Mavourneen, | Crouch |
| 10. { Good Night Farewell, | Kucken |
| { Molly Baun, | Irish Song |

Price Complete, Full Orchestra and Piano, \$1 net Each Number

J. W. PEPPER, Publisher,
 S. W. Cor. EIGHTH & LOCUST Sts., Phila., Pa.

JUST OUT!!

ANOTHER NOVELTY.

How to Tripple-Tongue.

THE SECRET EXPLAINED.

A Treatise on Staccato Tongueing—Single, Double and Tripple Form.

BY **T. H. ROLLINSON.**

WITH

10 TRIPPLE-TONGUEING SOLOS.

BY **J. LEVY.**

INCLUDING HIS MOST POPULAR PIECES, Viz :

- | | |
|---|------|
| 1. Levy-athen Polka. | Levy |
| 2. Grand Russian Fantasia. | " " |
| 3. The Salute Polka. | " " |
| 4. Yankee Doodle, with Variations. | " " |
| 5. God Save the Queen, with Variations. | " " |
| 6. Emily Polka. | " " |
| 7. Carnival of Venice, with Variations. | " " |
| 8. The Whirlwind Polka. | " " |
| 9. Rode's Air, with Variations. | " " |
| 10. The Best Shot Polka. | " " |
| 11. Lizzie Waltzes. | " " |
| 12. H Mio T saro. | " " |
| 13. Cradle Song. | " " |
| 14. Vol che Sapete. | " " |
| 15. Ah che Assorta. | " " |
| 16. L'Eclair. | " " |
| 17. Grand Russian Fantasia. | " " |
| 18. Yankee Doodle Polka. | " " |
| 19. Ah che la merce. | " " |
| 20. Oh Music's Soft Pinions. | " " |
| 21. Atilla. | " " |
| 22. La Mia Letizia. | " " |
| 23. God Save the Queen (Var). | " " |
| 24. Last Rose of Summer. | " " |
| 25. Nilsson Waltzes. | " " |
| 26. A te o'Car. | " " |
| 27. Emily Polka. | " " |
| 28. Cho Faro Senza. | " " |
| 29. Robert Tol Que Jaime. | " " |
| 30. Crada Funesta. | " " |
| 31. Vi Ravviso. | " " |
| 32. Carnival of Venice (Var.). | " " |
| 33. Whirlwind Polka. | " " |
| 34. All is Lost. | " " |
| 35. Cujus Anima. | " " |
| 36. White Rose Waltzes. | " " |
| 37. Rode's Air with Variations. | " " |
| 38. Andante (Original). | " " |
| 39. Du Du Leigt (Variations). | " " |
| 40. Semiramide. | " " |
| 41. Fra Poco. | " " |
| 42. Ave Maria. | " " |
| 43. Best Shot Polka. | " " |
| 44. Marie. | " " |
| 45. Ernani, Ernani Involami. | " " |
| 46. Grace. | " " |
| 47. Una Voce Poco Fa. | " " |
| 48. Russian Melody. | " " |
| 49. The Harp That Once Thro'. | " " |
| 50. Promenade Polka. | " " |

A Careful Study of this Book, together with Practice, will enable any Cornetist to play the most difficult Solo in a short time.

Price of this Superb Work (Complete)

ONLY \$1.00 NET.

J. W. PEPPER, Publisher,

S. W. cor. 8th & Locust Sts., Phila.

CORNET PLAYER'S DELIGHT.

A NEW BOOK CONTAINING 27 SOLOS.
 FOR CORNET OR ALTO ALONE.
 ENGRAVED ON EXTRA LARGE PLATES.
FULL MUSIC SIZE.
PRICE COMPLETE, 50c., Net.

No. 1 CONTAINS:

- | | |
|-------------------------|---------------------------|
| 1 Nancy Leo (Song). | 15 Emily Polka (Solo). |
| 2 Cruikshank Lawn. | 16 Serenade, Trovatore. |
| 3 Clarinda Polka (Solo) | 17 Selection, M. ritana. |
| 4 Pretty Galop. | 18 Chimes of Normandy. |
| 5 Reception March | 19 Woodland Polka. |
| 6 Emma Waltz (Solo) | 20 Quick March Electric |
| 7 When You and I | 21 Favorite Mazurka |
| 8 The Shepherd Boy. | 22 Sophie Waltz. |
| 9 Selection Boh'n Girl. | 23 Youthful Fire Galop. |
| 10 By the Sea Wave. | 24 Shells of Ocean, Song. |
| 11 Violotta Mazourka. | 25 Cornet Polka—Bou- |
| 12 Beauty Galop. | quet of Sparks. |
| 13 Surprise Quickstep. | 26 Song without Words. |
| 14 My Little Rose Bud. | 27 Selection, Martha. |

No. 2 CONTAINS:

- | | |
|--------------------------|-------------------------|
| 1 Call Me Thine Own. | 16 Daisy Mazurka. |
| 2 Polka—Adieu. | 17 Friends of my Youth. |
| 3 Mazurka—New Life. | 18 Serenade to Ida. |
| 4 "Iron Horse" Galop. | 19 Good Bye, Sweet- |
| 5 Quickstep Montrose. | heart (Song). |
| 6 "Autumn Leaves"— | 20 "Sorry Her Lot." |
| Waltz. | 21 Snow Drop (Polka). |
| 7 Enchanting Polka. | 22 Lillies' Galop. |
| 8 Kathleen Mavour- | 23 "Where My Sweet |
| neen—Serenade. | Lillie Lies." Song. |
| 9 Selection, Fra Diavolo | 24 "Jupiter March." |
| 10 Selection, Trovatore. | 25 "Little Butter-Cup |
| 11 Cornet Solo—Ballad. | Waltz. |
| 12 "Etude Polka" | 26 "Elegant Mazurka." |
| 13 La Roses Waltzes. | 27 "Linden Waltz." |
| 14 Elvira Galop. | |

No. 3 CONTAINS:

- | | |
|---------------------------|--------------------------|
| 1 Tidal Wave Galop. | 18 Grand Selection, Boc- |
| 2 Lydia Mazurka. | caccio. |
| 3 Bocaccio March. | 19 Secret Love, Gavott. |
| 4 Gilded Age Waltz. | 20 City Cadets' March. |
| 5 The old folks are gone. | 21 Andante & Schott'e, |
| 6 Touch the aarp gently | "Au Revoir." |
| 7 Dew Drop Waltz. | 22 Hardy Ever, Song. |
| 8 Souvenir du Homer | 23 Grand Selection, Tré- |
| Aria. | viats. |
| 9 Phonograph Galop. | 24 Serenade, O'Summer |
| 10 Song, Speak to Me. | Night. |
| 11 Mazurka Austrienne | 25 Waltz, Tales From |
| 12 Parigi di Cara. | Home. |
| 13 Andante, Original. | 26 Quick March, "St. |
| 14 Constellation (Corn't) | George." (Cornet) |
| Polka. | 27 Eureka (Cornet) |
| 15 Blue Alsatian Moun- | 28 Selection from Wm. |
| tainz. | Tell. |

ARTIST'S STUDIO.

A CHOICE COLLECTION OF

CORNET SOLOS

WITH

PIANO ACCOMPANIMENT.

BY

J. LEVY,

THE WORLD-RENOWNED SOLOIST.

PRICE 50c NET, EACH PIECE.

Any 5 Numbers \$2.00 Net.

FULL MUSIC SIZE. EACH PART SEPARAT

N. B.—Every Copy has J. Levy's Portrait o the title page

- | | |
|---------------------------------|------|
| 1. Levy-athen Polka. | Levy |
| 2. Ah Forse Lui. | " " |
| 3. The Salute Polka. | " " |
| 4. Casta Diva (Norma). | " " |
| 5. Yankee Doodle (Variations). | " " |
| 6. Bella Niccome. | " " |
| 7. The Adieu. | " " |
| 8. Adelaide. | " " |
| 9. Lizzie Waltzes. | " " |
| 10. H Mio T saro. | " " |
| 11. Cradle Song. | " " |
| 12. Vol che Sapete. | " " |
| 13. Ah che Assorta. | " " |
| 14. L'Eclair. | " " |
| 15. Grand Russian Fantasia. | " " |
| 16. Yankee Doodle Polka. | " " |
| 17. Ah che la merce. | " " |
| 18. Oh Music's Soft Pinions. | " " |
| 19. Atilla. | " " |
| 20. La Mia Letizia. | " " |
| 21. God Save the Queen (Var). | " " |
| 22. Last Rose of Summer. | " " |
| 23. Nilsson Waltzes. | " " |
| 24. A te o'Car. | " " |
| 25. Emily Polka. | " " |
| 26. Cho Faro Senza. | " " |
| 27. Robert Tol Que Jaime. | " " |
| 28. Crada Funesta. | " " |
| 29. Vi Ravviso. | " " |
| 30. Carnival of Venice (Var.). | " " |
| 31. Whirlwind Polka. | " " |
| 32. All is Lost. | " " |
| 33. Cujus Anima. | " " |
| 34. White Rose Waltzes. | " " |
| 35. Rode's Air with Variations. | " " |
| 36. Andante (Original). | " " |
| 37. Du Du Leigt (Variations). | " " |
| 38. Semiramide. | " " |
| 39. Fra Poco. | " " |
| 40. Ave Maria. | " " |
| 41. Best Shot Polka. | " " |
| 42. Marie. | " " |
| 43. Ernani, Ernani Involami. | " " |
| 44. Grace. | " " |
| 45. Una Voce Poco Fa. | " " |
| 46. Russian Melody. | " " |
| 47. The Harp That Once Thro'. | " " |
| 48. Promenade Polka. | " " |

CAUTION—J. W. PEPPER'S EDITIONS OF LEVY'S SOLOS are the only ones printed with Piano Solos Cued into the Cornet Part, thereby making them easier, also saving a great deal of unnecessary counting to keep together.